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ABSTRACT

Provided in this document is a bibliography of selected literature addressing the interface between forestry and the social sciences. References include articles appearing in American and foreign professional journals, bibliographies, conference proceedings, and other types of publications. A subject-matter classification scheme (in outline format) is provided at the beginning of the document. Entries (numbered 1 to 636) are listed alphabetically by author according to topics indicated in this scheme. Major topic areas include social sciences applied to: (1) forestry at large (considering forest resources, economic development, policy, and other areas); (2) forest management (including multiple-use management and ownership options); (3) production of forest goods and services (covering outdoor recreation, wildlife and fish, wood production, and other areas); and (4) forest industries (considering wood-using industries, other forest industries, market and trade, and transportation). Each entry includes citation number, author(s), title, source, year, and number of pages. In addition, if the publication is not in English, the language used is indicated. Brief annotations are provided for most entries. An author index is also included. (JN)

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No. 66 March 1986

SOCIAL SCIENCES IN FORESTRY
A Current Selected Bibliography and Index

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PREFACE

This is the fifth issue of the Social Sciences in Forestry to be published at the University of Minnesota College of Forestry. We are continuing to index the backlog of relevant publications issued during 1982-84.

References submitted by foreign cooperators are acknowledged by the addition of the coooperator's initials directly following the annotation. We welcome contributions of either references to publications or the publications themselves. We would also welcome additional foreign cooperators, particularly from countries not represented on the title page of this issue. Anyone interested in serving as a cooperator should write to us at the University of Minnesota Forestry Library, 1530 North Cleveland Avenue, St. Paul, MN 55108.

Loans or xerox copies of publications indexed in Social Sciences in Forestry are available from the Interlibrary Loan Division, St. Paul Campus Libraries, 1984 Buford Avenue, St. Paul, MN 55108.

We gratefully acknowledge the contributions of four people who have helped to bring this issue to press: Theresa Surprenant, data entry operator; Keith Belli, programmer; Clara Schreiber, word processing specialist; and Ruth Davidson, secretary.

Jean Albrecht
Patricia Rodkewich

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SOCIAL SCIENCES APPLIED TO FORESTRY AT LARGE

GENERAL PUBLICATIONS

1 Buffington, C.D. et al., 1984. **Forestry in the Tennessee Valley: Looking beyond the year 2000.** Tennessee Valley Authority, Office of Natural Resources and Economic Development. vi, 19 pp. + app.

Prepared by Forestry Evaluation Task Force, Charles D. Buffington, Leader. The report covers forest resources in the Tennessee Valley, the forest products industry, domestic and export markets, protection of the forest environment, etc.

2 Connor, J., MacKinnon, G.A., and Matheson, D.L., 1984. **Forestry: Report of the Nova Scotia Royal Commission on Forestry.** Halifax. Royal Commission on Forestry. 113 pp.

Available from Nova Scotia Dept. of Lands and Forests, Halifax. Includes chapters on forest management, forest industry, forest land ownership, forest amenities, forest finance, etc.

3 Cubbage, F.W. and Robinson, V.L., editors, 1985. **Joint proceedings of the 1985 Southern Forest Economics Workshop...and the 1984 Southern Economic Association Convention....** [Raleigh, NC] 212 pp.

Proceedings available from D.L. Holley, School of Forestry, North Carolina State University, P.O. Box 5488, Raleigh, NC 27650. Theme of the SOFEW was "Trends in Growing and Marketing Southern Timber." Theme of the forestry session of the SEA was "Capital Budgeting in Forestry." Selected papers are indexed.

4 Garfitt, J.E., 1986. **The economic basis of forestry re-examined.** Quarterly Journal of Forestry 80:33-35.

5 Guldin, R.W., ed., 1984. **Payoffs from new techniques for managing and processing southern hardwoods: Proceedings 1984 Southern Forest Economics Workshop.** Raleigh, NC. 153 pp.

Proceedings available from D.L. Holley, P.O. Box 5488, Raleigh, NC 27650. Price, $7.50. Selected articles have been indexed.

6 Hinde, T., 1985. **Forests of Britain.** London, Victor Gollancz Ltd. 296 pp.

7 International Conference on Trees and Forests, Paris, 1986. **Man, trees and forests.** Preparatory documents for the International Conference on Forests and Trees no. 1. 11 pp.

8 International Conference on Trees and Forests, Paris, 1986. **The future of trees and forests in the developing societies: The case of the dry regions of Africa.** Preparatory documents for the International Conference on Forests and Trees no. 3. 19 pp.

9 International Conference on Trees and Forests, Paris, 1986. **The future of trees and forests in the industrialized societies: The case of Europe.** Preparatory documents for the International Conference on Forests and Trees no. 2. 24 pp.

10 Johansson, P.-O. and Lofgren, K.-G., 1985. **The economics of forestry and natural resources.** New York, Basil Blackwell. 292 pp.

"The object of this volume is to synthesize and integrate the existing work on forest economic theory." (p. ix)

11 Massey, J.G., Greber, B.J., and Cooney, T.M., editors, 1985. **Software solutions: Proceedings of a computer symposium, software fair and second annual meeting of the Forest Resources Systems Institute, Clarksville, Indiana, April, 21-24. 1985.** Florence, AL, Forest Resources Systems Institute. 228 pp.

Cosponsored by the Forest Products Research Society. Selected papers are indexed in this issue.

FOREST RESOURCES: REGIONAL, NATIONAL, INTERNATIONAL

12 Alaska Geographical Society, 1985. **Alaska's forest resources.** Alaska Geographic 12(2):1-199.

13 Beltz, R.C. and Johnson, R.L., 1984. **Midsouth hardwood resources.** In: Guldin, R.W., ed. Payoffs from new techniques for managing and processing southern hardwoods. pp. 1-5.

14 Brown, M.J., 1985. **Forest statistics for the Southern Piedmont of Virginia, 1985.** U.S. Forest Service, Resource Bulletin SE-81. 55 pp.

15 FAO, 1985. **Natural Resources Sectors: Forestry.** In: The State of Food and Agriculture, 1984. Rome: Food and Agricultural Organization of the United Nations. FAO Agriculture Series no. 18:68-73.

16 Franklin, J.F., 1982. **The true fir resource.** In: Proc. of the Biology and Management of True Fir in the Pacific Northwest Symposium. University of Washington, College of Forest Resources, Inst. of For. Res., Contribution 45:1-6.

17 Green, A.W., O'Brien, R.A., and Schaefer, J.C., 1985. **Montana's forests.** U.S. Forest Service, Resource Bulletin INT-38. 70 pp.
Presents highlights of the forest resources of Montana as of 1980.

18 Luzadis, V.A. and Lassoie, J.P., 1983. **New York's forests--1980.** Cornell University, New York State College of Agriculture and Life Sciences, Dept. of Natural Resources, Conservation Circular 21(3):1-8.
Summarizes "a 1980 survey with special reference to the changing nature of New York's forests."

19 Montana Forestry Division, 1984. **Timber resources of eastern Montana.** Montana Dept. of State Lands, Forestry Division; Forest Survey, Intermountain Forest and Range Experiment Station; and Region 1, U.S. Forest Service. 174 pp.

20 Organization for Economic Cooperation and Development, 1985. **Forest resources.** In: State of the environment 1985. Paris: OECD. pp. 119-133.
Covers the OECD countries.

21 Ostrom, A.J., 1985. **Forest area in Wisconsin, 1983.** U.S. Forest Service, Research Note NC-332. 4 pp.

22 Pennsylvania Bureau of Forestry, 1985. **Assessment and issues for Pennsylvania forest resources.** Rev. ed. Pennsylvania Dept. of Environmental Resources, Office of Resource Management, Bureau of Forestry. 67 pp.

A review of the forest situation in Pennsylvania, a summary of data and projections received from many sources and meant to be used as a basic information package for the Pennsylvania Forest Resources Planning Advisory Committee.

23 Raile, G.K., 1985. **Nebraska forest statistics, 1983.** U.S. Forest Service, Resource Bulletin NC-91. 70 pp.

24 Rhodes, T., 1985. **Hardwoods: The resource, the market, the future.** In: Proceedings 13th Annual Hardwood Symposium of the Hardwood Research Council. pp. 9-13.

25 Sedjo, R.A. and Clawson, M., 1984. **Global forests.** In: Simon, J.L. and Kahn, H., eds. The resourceful earth: A response to Global 2000. N.Y., Blackwell. pp. 128-170.

The authors examine the evidence regarding the current rate of deforestation and...conclude that the most recent and best evidence suggests that while serious local problems of excessive deforestation do exist in some regions of the tropics, the overall picture is not nearly as gloomy as portrayed in Global 2000. (Barney, 1980)." (p. 128)

26 Sheffield, R.M., Cost, N.D., Bechtold, W.A., and McClure, J.P., 1985. **Pine growth reductions in the Southeast.** U.S. Forest Service, Resource Bulletin SE-83. 112 pp.

Forest Survey data indicate that pine growth in much of the Southeast has slowed. Several possible causes are discussed.

27 Spears, J. and Ayensu, E.S., 1985. **Resources, development, and the new century: Forestry.** In: Repetto, R., ed. The Global Possible: Resources, development, and the new century. New Haven: Yale Univ. Press. pp. 299-335.

A general overview.

28 Waldrop, T.A. and Brooks, R.T., Jr., 1984. **Woody biomass analysis for 13 southeastern states.** Tennessee Valley Authority, Division of Land and Economic Resources, Technical Note B52. 149 pp.

"Estimates are presented for the woody biomass inventory; growth, removals, and net change of growing stock biomass; and the biomass potentially available each year for energy in each of 62 geographic units in 13 Southeastern states.

29 Wharton, E.H., Frieswyk, T.S., and Malley, A.M., 1985. **Aboveground tree biomass statistics for Maine: 1982.** U.S. Forest Service, Resource Bulletin NE-86. 116 pp.

"A statistical report based on the third forest survey of Maine conducted in 1980-82. Results of the survey are displayed in 87 tables containing estimates of timberland area, timber volume, numbers of trees, and aboveground tree biomass."

HISTORY

30 Albright, H.M., 1985. **The birth of the National Park Service: The founding years, 1913-33.** (by Horace M. Albright as told to Robert Cahn) Salt Lake City, Utah, Howe Brothers. 340 pp.

31 Baker, A.R.H., 1984. **Fraternity in the forest: The creation, control and collapse of woodcutters' unions in Loir-et-Cher, 1852-1914** Journal of Historical Geography 10:157-173.

32 Bartlett, R.A., 1985. **Yellowstone, a wilderness besieged.** Tuscon, University of Arizona Press. 436 pp.

A history of Yellowstone National Park.

33 Clark, T.D., 1986. **Ships to nowhere: The southern yellow pine fleet of World War I.** Journal of Forest History 30:4-16.

Describes the program to build wooden ships out of southern pine lumber during 1917-1918.

34 Coker, K.R., 1985. **A warehouse of forestry history: A success story in records management and records appraisal.** American Archivist 48:422-424.

Report on transfer of South Carolina Forestry Commission records to an archives.

35 Cox, T.R., Maxwell, R.S., Thomas, P.D., and Malone, J.J., 1985. **This well-wooded land: Americans and their forests from Colonial times to the present.** Lincoln, University of Nebraska Press. 325 pp.

36 Fellows, E.S., 1986. **Forestry's future frustrated or a condensed history of Canadian foresters' concern for forest renewal.** Forestry Chronicle 62:35-50.

"A 40-year review of the concerns of Canadian foresters over the lack of a national forest policy in general and over failure to provide adequately for forest renewal in particular, as told chiefly in the words of contemporary writings and speeches." (p. 35)

37 Guha, R., 1983. **Forestry in British and Post-British India, a historical analysis. (Part 2)** Economic and Political Weekly 18(45-46):1940-1947.

Section III discusses the evolution of forest legislation and Section IV includes the author's conclusions.

38 Guha, R., 1983. **Forestry in British and Post-British India, a historical analysis. (Part 1)** Economic and Political Weekly 18(44):1882-1896.

Section I of the paper deals with forestry in British India and Section II the post-colonial situation. (p. 1882)

39 Rohe, R.E., 1986. **The evolution of the Great Lakes logging**

camp, 1830-1930. Journal of Forest History 30:17-28.

40 Talbot, L., 1983. **Wooden gold: Early days of the sandalwood industry.** Forest Focus 30:21-31.
History of the sandalwood industry in Western Australia.

41 Texas Society of American Foresters, 1984. **Highlights of Texas Forestry.** Lufkin, TX, Texas Society of American Foresters. 30 pp.
Historical record compiled by the History Committee.

42 Usner, D.H., Jr., 1983. **A cycle of lowland forest efficiency: The late Archaic-Woodland economy of the lower Mississippi Valley.** Journal of Anthropological Research 39:433-444.
By combining wildlife and forest studies with ethnographic evidence, a cycle of food-procuring activities is outlined to illustrate how efficient exploitation of the lowland forest might have occurred from the late Archaic through the Woodland periods.

LEGISLATION

43 Green, P.F., 1982. **Government regulation in the forests: Impacts of the 1973 California Forest Practice Act.** University of California, Davis, Institute of Government Affairs and Institute of Ecology, Environmental Quality Series no. 36. 45 pp.

"This study analyzes the influence the act has had on private forest lands and concludes that it has had a significant impact on improving protection of non-timber resources." (p. i)

44 Griffin, N. and Watkins, C., 1986. **Liability for dangerous trees.** Quarterly Journal of Forestry 80:23-26.

"In this paper, recent cases dealing with liability for woodland and tree owners are outlined, and in particular the development of the concept of 'inequality of bargaining power' in relation to claims for liability." (p. 23)

45 Henly, R.K., 1986. **Cost, administration, and accomplishments of state forest practice regulation in the United States.** Plan B (M.S.) Paper, University of Minnesota, College of Forestry. 160 pp. + appendices.

46 Rupp, C.W., 1985. **Reflections and comments on impact of law and litigation on forest policy.** In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 284-286.

47 Siegel, W.C. and Cubbage, F.W., 1985. **Forestry legislative and regulatory trends--potential impact for the hardwood resource.** In: Proceedings 13th Annual Hardwood Symposium of the Hardwood Research Council. pp. 14-22.

POLICY

48 Higbie, W.R., 1985. **Public involvement: Natural resources management in a democratic society.** In: Forest Vegetation Management Conference, 6th, 1984. Proceeidngs. pp. 12-17.

49 Mater, J., 1985. **Using the public hearing process: Your opportunity to influence public decisions.** In: Forest Vegetation Management Conference, 6th, 1984. Proceedings. pp. 18-31.

50 McTaggart, W.D., 1983. **Forestry policy in Bali, Indonesia.** Singapore Journal of Tropical Geography 4:147-161.
Reviews contemporary forestry policy in the island.

51 Quebec Ministere de l'Energie et des Ressources, 1984. **La politique forestiere du Quebec: Problematique d'ensemble.** Quebec Ministere de l'Energie et des Ressources. 143 pp.
In French. Forest policy in Quebec: The overall problem.

52 Reed, F.L.C., 1985. **Reshaping forest policy in British Columbia.** Forest Planning Canada 1(2):15-18.

53 Royer, J.P., 1985. **Forest policy: Leading the followers.** In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 395-398.

PLANNING

54 Benfield, F.K., 1985. **The Forest Service and the public in the 1980s: Can the damage be repaired?** In: U.S. Forest Service. Proceedings Forest Transportation Symposium, Casper, Wyoming, 1984. pp. 200-215.

This paper discusses four aspects of public participation as it relates to the Forest Service.

55 Booth, T.H. and Saunders, J.C., 1985. **A trial application of the FAO 'Guidelines on land evaluation for forestry'.** Canberra, CSIRO Institute of Biological Resources, Division of Water and Land Resources, Divisional Report 85/3. 70 pp.

"This study demonstrates the use of the FAO Guidelines...to develop multiple use plans for a forest area."

56 Burns, J.E., 1984. **Relating energy development to key wildlife and environmental values by forest planning.** In: Issues and Technology in the Management of Impacted Western Wildlife, Proc. of a National Symposium, 1982. Boulder, Colorado, Thorne Ecological Institute, Technical Publication 14:39-42.

57 Burtis, J., Jr., 1985. **Coordinaiton with other state agency planners: A Maryland case study.** In: Northeastern Forest Resource Planners Association. Proc. 7th annual...conference, 1985. pp. 39-40.

58 Dippon, D.R., 1985. **Forest management means multiple stand management; computers can help!** In: Massey, J.G. et al., eds. Software solutions. pp. 4-9.

"Integrated forest planning can be facilitated with mathematical programming, simulation or spreadsheet software packages which can now be implemented on a microcomputer."

59 Godlevske, H.L., 1985. **How planners can coordinate their efforts to improve state resources and national forest plans from a national forest perspective.** In: Northeastern Forest Resource Planners Association. Proc. 7th annual...conference, 1985. pp. 45-47.

60 Greenhalgh, R., 1984. **Timber demand estimates for forest land management planning.** In: Guldin, R.W., ed. Payoffs from new techniques for managing and processing southern hardwoods. pp. 143-145.

61 Hamilton, T., 1985. **State participation in RPA planning-federal view.** In: Northeastern Forest Resource Planners Association. Proc. 7th annual...conference, 1985. pp. 56-57.

62 Hammond, S. and Hammond, H., 1985. **Sustainable forest planning and use.** Forest Planning Canada 1(4):8-10.

63 Hanson, D., 1986. **The rise and demise of forest planning.** Sierra 71(1):40-46.

64 Hendricks, R.L., 1985. **A Forest Service planning perspective.** In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 310-312.

The author states that "Planners in the Forest Service are too involved with process requirements and have not properly defined their roles in decision making."

65 Hitchcock, R.B., 1985. **How state foresters, national forest managers and state forest resource planners can coordinate efforts to improve state and national forest plans.** In: Northeastern Forest Resource Planners Association. Proc. 7th annual...conference, 1985. pp. 52-55.

66 Irland, L.C., 1986. **Strategic thinking--a critical gap in American forestry planning and management.** Renewable Resources Journal 4(1):14-18.

67 Irland, L.C., 1986. **'Strategic thinking' lacking in U.S. forestry planning.** Forest Industries 113(1):34-35.

68 Jamnick, M.S. and Ostermeier, D.M., 1983. **Alternative futures for Tennessee forest resources: Workshop scenarios.** University of Tennessee, Knoxville, Dept. of Forestry, Wildlife, and Fisheries. var. pag.

"This document presents four alternative scenarios for Tennessee forest resources" that were prepared for a workshop held in March, 1983. The goal of the workshop was "to identify forestry issues (problems or opportunities)...of importance to the Tennesseee Division of Forestry or various other users and managers of the forest resource."

69 Johnson, K.N., 1985. **Integrating economic analysis into strategic planning on the national forests.** In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 276-279.

70 Joyce, L.A., McKinnon, B., Hof, J.G., and Hoekstra, T.W., 1983. **Analysis of multiresource production for national assessments and appraisals.** U.S. Forest Service, Gen. Tech. Rep. RM-101. 20 pp.

"This paper gives an overview of the analytical methods that have been used in integrated (multidisciplinary, multiresource, and multilevel) land management production analyses. The ecological and economic theory underlying both simulation and optimization methods are also reviewed."

71 Ludeman, W.W., 1985. **Transactive planning: A timber industry viewpoint.** In: Society of American Foresters. Foresters'

future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 315-318.

The author concludes that "an approach to planning based on a transactive "partnership" concept could help minimize disagreement and maintain conflict at a manageable level."

72 McDonald, G.T., 1984. **Planning rural land development: Forestry and agriculture in northeastern Australia.** Australian Geographical Studies 22:100-121.

"Australia has a limited area of land suitable for the production of food, fibre and forest products and governments are under increasing pressure...to release those small areas of land.... This article presents a number of measures of the likely efficiency and regional economic impacts of plantation forestry and agriculture...where such a decision must be made...." (p. 100)

73 McLaughlin, W.J. and Force, J.E., 1985. **Planners and the planning process: Leaders, followers, partners?** In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 301-306.

"Three major topics are presented in this paper. First, planning models or styles used by urban and regional planners and National Forest Service planners for the decades of the 60s, 70s and 80s are compared.... Second, the perceived roles of forest service officals in the NFMA planning process is explored. Third, changing roles and future roles of forest planners in the 1990s are hypothesized."

74 Meyer, D.L., 1985. **Coordination efforts to improve state forest resource plans and NF plans.** In: Northeastern Forest Resource Planners Association. Proc. 7th annual...conference, 1985. pp. 41-44.

75 Millar, S., 1985. **Obstacles in using supply/demand analyses in forest planning.** In: Northeastern Forest Resource Planners Association. Proc. 7th annual...conference, 1985. pp. 123-125.

76 Mills, D.L., 1985. **Cooperation betweeen planners in state forest resource planning.** In: Northeastern Forest Resource Planners Association. Proc. 7th annual...conference, 1985. pp. 35-38.

77 Mississippi Forestry Commission, 1985. **Pathways for forestry in Mississippi: A giant step into the 21st century.** Report no. 2. Mississippi Forestry Commission. 43 pp.

A collection of task force reports on such subjects as "forestry productivity," "market development," "taxation policy," "foreign trade," "education," "transportation," and "research."

78 Musser, W.N., Ziemer, R.F., and White, F.C., 1982. **Trade-offs**

between nonmarket and market land use: Crop production, forestry, and outdoor recreation. University of Georgia, College of Agriculture, Experiment Stations, Research Bulletin 270. 23 pp.

Presents "a case study of the market and nonmarket costs and benefits associated with...the conversion of land from forestry to crops in Georgia during the period of 1973-76." (p. 1)

79 Northeastern Forest Resource Planners Association, 1985. **Proceedings of the seventh annual Northeastern Forest Resource Planners Conference, Milwaukee, 1985.** Northeastern Forest Resource Planners Assoc. with assistance of USDA Forest Service, State and Private Forestry, Broomall, PA. 127 pp.

Selected papers are indexed.

80 O'Connell, P.F., 1985. **Forest research planning at the national level.** In: Northeastern Forest Resource Planners Association. Proc. 7th annual...conference, 1985. pp. 9-11.

81 Oklahoma Forestry Division, 1983. **"Program direction through 1995": Oklahoma's State Forest Resource Plan.** Oklahoma State Dept. of Agriculture, Forestry Division. 71 pp.

82 Pennsylvania Bureau of Forestry, 1982. **Assessment and issues for Pennsylvania forest resources.** Pennsylvania Dept. of Environmental Resources, Bureau of Forestry. 67 pp.

This publication was "meant to be used as a basic information package for the Pennsylvania Forest Resources Planning Advisory Committee...."

83 Pennsylvania Bureau of Forestry, 1985. **Commonwealth forest resource plan.** Pennsylvania Dept. of Environmental Resources, Bureau of Forestry. 41 pp.

84 Price, D.M., Rice, C., and Kyle, A., 1984. **South Carolina forest resource plan.** South Carolina Forestry Commission. 27 pp.

85 Rhode Island Office of State Planning, 1984. **Rhode Island forest resources management plan.** Prepared by office of State Planning and the Rhode Island Div. of Forest Environment. State Guide Plan Element 161, Report no. 45. var. pag.

Among the issues addressed by the plan are: The establishment of specific forest resources management goals and policies; the improved management of state and private forests; expanded forest products markets; development of programs to protect against fire, insects, and disease.

86 Shands, W.E., 1986. **RPA at the turning point.** Journal of Forestry 84(2):20-24.

"Competing interests agree that it can be a vision of the future or a costly exercise of dubious value." (p. 20)

87 Sirmon, J.M., 1985. **Planning for the public lands--A manager's response.** In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 307-309.

88 Smith, B. and Wilson, P., 1984. **The public's evaluation of land use options in two New Zealand regions.** New Zealand Journal of Forestry 29:249-268.

This paper is based on a survey carried out in the Nelson and East Coast (North Island) regions which explores the attitudes and perceptions residents have towards selected future development options.

89 Smith, E.L., 1985. **Economic development considerations in public timber planning.** In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 292-296.

90 Teeguarden, D.E., 1985. **Implementation of planning and economic theory in forest management.** In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 280-283.

91 Thiede, G., 1985. **Coordination efforts to improve state and national forest plans.** In: Northeastern Forest Resource Planners Association. Proc. 7th annual...conference, 1985. pp. 48-51.

92 Vaillancourt, G., 1985. **Interagency cooperation in planning: A case study from New Hampshire's experience.** In: Northeastern Forest Resource Planners Association. Proc. 7th annual...conference, 1985. pp. 31-34.

93 Wyoming State Forestry Division, 1983. **Wyoming state forest resource program.** Wyoming State Forestry Division. 53 pp.

Describes the Wyoming State Forest Resource Plan.

APPRAISAL AND VALUATION

94 Davis, S.H., Jr., 1983. **Tree valuation pitfalls.** Journal of Arboriculture 9:164-166.

95 Frank, A.B., Gavit, R.J., and Heintz, R.H., 1982. **A practical guide for evaluating a windbreak.** In: Great Plains Agricultural Council. Windbreaks: What are they worth? pp. 182-190.

96 Heintz, R.H., 1982. **Windbreak valuation.** In: Great Plains Agricultural Council. Windbreaks: What are they worth? pp. 151-152.

97 Helwig, L., 1982. **The investment/replacement way to find the value of a shelterbelt/windbreak.** In: Great Plains Agricultural Council. Windbreaks: What are they worth? pp. 153-168.

98 Krutilla, J.V. and Fisher, A.C., 1985. **The economics of natural environments: Studies in the valuation of commodity and amenity resources.** Washington, D.C., Resources for the Future. 300 pp.

"This volume...addresses the valuation, allocation, and management of the resources--commercial and otherwise--of natural environments. In particular it seeks to engage the range of amenity resources that, while long recognized in public policies providing...for National Parks, Wildlife Reguges, and Wilderness Areas, have not been explicitly included in economic analyses." (p.xiii)

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102 Stout, A.T., 1984. Timber values in California's Yolla Bolly-Middle Eel Wilderness Addition. Washington, D.C., Wilderness Society. 35pp.

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103 Wagner, W.L., 1985. Forest valuation--a response. Forest Planning Canada 1(5):24-26.

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104 Banzhaf, George & Co., 1985. **The impact of Treasury II on timber investments: A comparison with other investment alternatives.** Milwaukee, George Banzhaf & Co. 13 pp.

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106 Campbell, G.E., 1985. **Forestry investment considerations.** Illinois Forest Management: A Quarterly Newsletter for Illinois Landowners 8:1-3.

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108 Crowell, J.B., Jr., 1985. **Deficits, compound interest and the Forest Service.** Berkeley, University of California, College of Natural Resources, Dept. of Forestry and Resource Management. S.J. Hall Lectureship in Industrial Forestry, Nov. 21, 1985. 9 pp.

109 Cubbage, F.W. and Redmond, C.H., 1985. **A survey of capital budgeting in forest industry.** In: Cubbage, F.W. and Robinson, V.L., eds. Joint proceedings 1985 Southern Forest Economics Workshop and 1984 Southern Economic Assoc. Convention. pp. 190-200.

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113 Fraser, G.A., 1985. **Benefit-cost analysis of forestry investment.** Canadian Forestry Service, Pacific Forestry Centre, Information Report BC-X-275. 20 pp.

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117 Hof, J.G., Lee, R.D., Dyer, A.A., and Kent, B.M., 1985. **An analysis of joint costs in a managed forest ecosystem.** Journal of Environmental Economics and Management 12:338-352.

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118 Kula, E., 1984. **Justice and efficiency with the sum of discounted consumption flows method.** Environment and Planning A 16:835-838.

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119 Lappi, J. and Siitonen, M., 1985. **A utility model for timber production based on different interest rates for loans and savings.** Silva Fennica 19:271-280.

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120 Lewis, D.K., 1985. **Economic principles for forestry investments.** In: Cubbage, F.W. and Robinson, V.L., eds. Joint proceedings 1985 Southern Forest Economics Workshop and 1984 Southern Economic Assoc. Convention. pp. 151-164.

121 Myles, G.A., 1984. **Forestry investments and taxes.** National Public Accountant 29(6):34-38.

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122 Price, C., 1984. **The sum of discounted consumption flows method: Equity with efficiency?** Environment and Planning A 16:829-833.

123 Price, C., 1986. **What does it cost to use an idle machine?** Scottish Forestry 40:10-18.

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124 Redmond, C., 1984. **A case for time dependent discount rates.** In: Guldin, R.W., ed. Payoffs from new techniques for managing and processing southern hardwoods. pp. 146-147.

125 Redmond, C.H. and Cubbage, F.W., 1985. **Capital budgeting in the forest products industry: A survey and analysis.** University of Georgia, College of Agriculture, Experiment Stations, Research Bulletin 333. 39 pp.

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126 Sinclair, S.A., Chambers, P.C., and Hansen, B.G., 1985. **Forest Products Investment Model: Investment decisionmaking on the microcomputer.** In: Massey, J.G. et al., eds. Software solutions. pp. 188-192.

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129 Walters, N.R. and Miner, C.L., 1985. TWIGS: A tool for forestry professionals. In: Massey, J.G. et al., eds. Software solutions. pp. 29-32.

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132 Blackman, T., 1985. **Timberland value depends on tax reform.** Forest Industries 112(11):13.

133 Gardner, A.B., Olson, S.C., Haney, H.L., Jr., and Siegel, W.C., 1984. **Election by forest estates of certain federal estate tax provisions.** Journal of Agricultural Taxation & Law 6:400-428.

134 Hickman, C.A., Huebner, A., and Kaiser, H.F., 1985. **USDA's tax equivalency initiative: A preliminary assessment of its potential fiscal impacts.** In: Cubbage, F.W. and Robinson, V.L., eds. Joint proceedings of 1985 Southern Forest Economics Workshop and 1984 Southern Economic Assoc. Convention. pp. 71-81.

135 Huebner, A.E., Hickman, C.A., and Kaiser, H.F., 1985. **A tax equivalency study on national forest system lands in the United States.** U.S. Forest Service FS-396. 50 pp.

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136 Myles, G.A., 1985. **Following the lead of the tax agent.** In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 390-394.

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137 Siegel, W.C., 1984. **Get proper tax credit for management costs and depreciation.** Forest Farmer 43(3):8-9.

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139 Stier, J.C., 1986. **Forest taxation: A bibliography of literature for the period 1980-1985.** University of Wisconsin-Madison, Department of Forestry, Staff Paper Series no. 25. 15 pp.

140 Stier, J.C., Denney, R.E., and Lapidakis, J., 1984. **Wisconsin**

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141 Zigmund, H. et al., 1984. Minnesota's tax policy and the state's forestry and forest industry: A statement prepared by the Governor's Commission on Wood Products. Mimeo. 15 pp.

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142 Carpenter, J.E., 1982. Cost-share program on windbreaks and shelterbelts. In: Great Plains Agricultural Council. Windbreaks: What are they worth? pp. 196-198.

143 Cubbage, F., 1984. Public assistance programs for private forest landowners in Georgia. TOPS (Georgia Forestry Association) 18(4):12-14.

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145 U.S. Agricultural Stabilization and Conservation Service, 1985. Forestry Incentives Program from inception of program through September 30, 1984. U.S. Department of Agriculture, Agricultural Stabilization and Conservation Service. 48 pp.

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146 Hyman, E.L., 1986. Opportunites and constraints for organizations to help sustain tropical forest resources. Environmental Management 1:11-20.

147 Joshi, D.P., 1984. Forests and rural development in the Himalayan Hill Region of U.P. In: Joshi, S.C., Rural development in the Himalaya: Problems & prospects. Naini Tal, U.P. Gyanodaya Prakashan. pp. 79-88.

148 Lichty, R. and Jesswein, W., 1986. The economic impact of a new pulp and paper facility on northeast Minnesota. University of Minnesota, Duluth, School of Business and Economics, Bureau of Business and Economic Research, Working Paper no. 86-1. 28 pp.

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149 Spears, J., 1985. Role of development banks in forestry financing. In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National convention. pp. 343-345.

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150 U.S. Office of Technology Assessment, 1984. Technologies to sustain tropical forest resources. U.S. Congress, Office of Technology Assessment, OTA-F-214. 344 pp.

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151 Arnold, J.E.M., 1983. Replenishing the world's forests: Community forestry and meeting fuelwood needs. Commonwealth Forestry Review 62:183-189.

152 Bajracharya, D., 1983. Fuel, food, or forest? Dilemmas in a Nepali village. World Development 11:1057-1074.

"Policy implications suggest that to control deforestation, food produciton and distribution practices need to be improved, existing forests need to be managed better to increase sustainable fuelwood supply, and the direct participation of local people is indispensable to implement desired improvements." (p. 1057)

153 Barnes, C., Ensminger, J., and O'Keefe, P., editors, 1984. Wood, energy and households: Perspectives on rural Kenya. Stockholm, Beijer Institute, Royal Swedish Academy of Sciences; Uppsala, Scandinavian Institute of African Studies. Energy, Environment and Development in Africa no. 6. 213 pp.

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154 Bell, T.I.W. and Evo, T., 1983. Fuelwood plantations and the Fijian Village Community. Fiji Pine Research Paper no. 12. 6 pp.

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155 Burch, W.R., Jr., 1984. An interpretation of discussion at a workshop on: The human factors affecting forestry/fuelwood projects: An agenda for research and development (Washington, D.C., Feb., 1984). No publishing information given. 98 pp.

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156 Freese, P. and O'Brien, T.J., 1983. Forests, trees and people: A preliminary report on the impact of industrial tree plantations and tree-farming projects on small Filipino farmers. Davao City, Philippines, Alternate Resource Center. 110 pp.

157 Gupta, R.K., 1984. Restoration of wasted community lands for silvipastoral management under social forestry in U.P. Himalayas. In: Joshi, S.C., ed., Rural development in the Himalaya: Problems and prospects. Naini Tal, U.P., Gyanodaya Prakashan. pp. 163-175.

158 Malhotra, S.P., 1985. Role of communities in project

implementation. In: Sand dune stabilization, shelterbelts and afforestation in dry zones. Rome, Food and Agriculture Organization of the United Nations. FAO Conservation Guide no. 10. pp. 175-181.

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159 Miller, J.A., 1984. Bibliography on human factors affecting forestry/fuelwood projects. In: Burch, W.R., Jr. An interpretation of discussion at a workshop on: The human factors affecting forestry/fuelwood projects. Appendix 4, 28 pp.

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162 Shah, S.L., Melkania, N.P., and Joshi, C., 1984. Social forestry—the key to integrated rural development in Western Himalayas. In: Joshi, S.C., ed. Rural Development in the Himalaya: Problems and prospects. Naini Tal, U.P., Gyanodaya Prakashan. pp. 231-247.

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164 Arthur-Worsop, M.J., 1984. **An economic evaluation of agroforestry: The national viewpoint.** In: Proceedings of a Technical Workshop on Agroforestry, Dunedin, May, 1984. Wellington, New Zealand Ministry of Agriculture and Fisheries. pp. 61-70.

165 Awang, K., 1985. **Some agroforestry practices in Southeast Asia.** Universiti Pertanian Malaysia, Faculty of Forestry, Occasional Paper no. 4. 21 pp.

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166 Brokensha, D., Castro, A.P., Kundu, M., and Hewlett, B., 1984. **Fuelwood, agro-forestry, and natural resource management: The development significance of land tenure and other resource management/utilization systems.** Binghamton, N.Y., Institute for Development Anthropology. 64 pp.

167 Eren, T., 1985. **Agro-forestry in arid and semi-arid zones.** In: Sand dune stabilization, shelterbelts and afforestation in dry zones. Rome, Food and Agriculture Organization of the United Nations. FAO Conservation Guide no. 10. pp. 169-174.

168 Ghosh, R.C., 1985. **Sylvipastoral systems—the concepts: Old and new.** In: Sand dune stabilization, shelterbelts and afforestation in dry zones, Rome, Food and Agriculture Organization of the United Nations. FAO Conservation Guide no. 10. pp. 153-158.

169 Gupta, T., 1985. **Economics of sylvi-pastoral systems in India.** In: Sand dune stabilization, shelterbelts and afforestation in dry zones. Rome, Food and Agriculture Organization of the United Nations. FAO Conservation Guide no. 10. pp. 159-167.

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170 McDermott Associates, 1984. **Evaluation of agroforestry at regional and national levels.** In: Proceedings of a Technical Workshop on Agroforestry, Dunedin, May, 1984. Wellington, N.Z., Ministry of Agriculture and Fisheries. pp. 89-98.

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171 Patel, V.J., 1985. **Wastelands development through agroforestry.** Surendrabag, Gujarat, India, Jivrajbhai Patel Agroforestry Centre. 48 pp.

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172 Percival, N.S. and Knowles, R.L., 1983. Agroforestry: Expanding horizons. Proceedings, Ruakura Farmers' Conference 35:37-40. (NZFS Reprint 1665)

173 Reid, R. and Wilson, G., 1985. Agroforestry in Australia and New Zealand. Victoria, Goodard and Dobson Publishers. 223 pp.
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174 Vergara, N.T., 1984. Agroforestry land-use systems in the ASEAN Region: Problems and issues. In: ASEAN Forestry Congress, 1st, Manila, 1983. Proceedings. Quezon City, Bureau of Forest Development, Public Affairs Office 3:660-675.

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177 Woods, F.W. and Ostermeier, D., 1985. Agroforestry, a lesson from the Third World. Futurist 19(4):24-26.
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179 Houle, N., 1985. The economic importance of Quebec's forests. Milieu 31:29-32.

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180 Illyes, B., 1985. [Economic regulators of the Hungarian forest economy.] Sylwan 129(9):39-42.

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181 Risvand, J., 1985. [Forestry in the social economy of Denmark.] Dansk Skovforenings Tidsskrift 70:289-307.

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182 Voyer, R.D. and Murphy, M.G., 1984. Global 2000: Canada, a view of Canadian economic development prospects, resources and the environment. Toronto, Pergamon Press, 1984. 164 pp.

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183 Albertson, M.H., 1985. **Women's progress in forestry: Examples from the Philippines and U.S. 2. Women in USDA Forest Service.** Philippine Lumberman 31(7):9, 15, 37.

184 Appler, C.L., 1986. **The forester as expert witness.** Journal of Forestry 84(3):21-24.

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185 Bentley, O.G., 1986. **Science and education and the science of range management.** Renewable Resources Journal 4(1):25-26.

186 Burdge, R.J., 1984. **Teaching social impact assessment at the college level.** In: Wenner, L.N., ed. **Issues in social impact analysis: Proceedings from an interagency symposium.** pp. 58-64.

187 Clark, T.W., 1986. **Professional excellence in wildlife and natural resource organizations.** Renewable Resources Journal 4(1):8-13.

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188 Cooper, A.W., 1985. **Educational requisites for leadership in multi-resource forest land management.** In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 204-206.

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190 Duerr, W.A., 1986. **Forestry's upheaval.** Journal of Forestry 84:20-26.

The author asks the question: "Are advances in Western civilization redefining the profession?"

191 Duncan, D.P., 1985. **Recreation education in forestry schools.** In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 371-372.

192 Field, D.B., 1986. **Consulting foresters.** Journal of Forestry 84(2):25-29.

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193 Fusco, E.M., Marsinko, A., and Kessler, G., 1985. **Survey of consulting foresters working in South Carolina.** Clemson University, College of Forest and Recreation Resources, Dept. of Forestry, Forest Research Series no. 41. 20 pp.

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194 Heymanowski, K., 1985. **[Introductory evaluation of the present system of forest education in Poland in the light of actual and prospective demand for personnel in forestry.]** Sylwan 129(8):1-16.

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195 Kent, J.A., 1985. **Foresters on the threshold: The beginning or the end of an era?** In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 10-13.

196 Mauti, S., 1986. **Women in range management: Is there a difference?** Women in Forestry 7(4):17-18.

197 Merideth, R.W., Jr. and Sacks, A.B., 1986. **Education in environmental remote sensing: A bibliography and characterization of doctoral dissertations.** Photogrammetric Engineering and Remote Sensing 52:349-365.

This paper presents a detailed bibliography of remote sensing dissertations published in the U.S. and Canada from 1965-1984. Arranged by subject and then alphabetically by author.

198 Nordin, V.J., 1985. **Development of international forestry curricula—the Toronto experience.** In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 331-335.

199 O'Laughlin, J., 1985. **Forestry "futures" education: Survey results.** In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 356-359.

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200 Ostermeier, D.M., 1985. **Shaping the foresters' image of the future.** In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 360-364.

201 Reed, F.L.C., 1985. Another dimension for leadership in forestry. In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 14-17.

202 Sampson, R.N., 1985. The impact of social and political trends on forestry and foresters. In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 18-22.

203 Schick, B.A., 1985. Trends and professional forestry education: An employer's perspective. In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 30-32.

204 Shafer, E.L., 1985. Future prospects for outdoor recreation education. In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 365-370.

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205 Society of American Foresters, 1985. Ethics guide. Bethesda, MD, Society of American Foresters. 35 pp.

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207 Society of American Foresters, 1985. SAF forest policies and positions 1985. Bethesda, MD, Society of American Foresters. 65 pp.

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B-1508. 14 pp.
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211 Tikkala, W.R., 1983. Directory of urban and community forestry professionals in the U.S. and Canada. Washington, D.C., American Forestry Association. 144 pp.

212 Walsh, B.W., 1986. Competing for clients. Journal of Forestry 84(2):30-31, 41-44.
Consulting foresters are competing with government in providing services to landowners.

213 Ward, D.M., 1986. The 16 plus Action Plan and the Scottish School of Forestry. Scottish Forestry 40:26-33.
"The Action Plan is designed...to make training more relevant to the needs of industry on the one hand and to the needs of the individual student on the other." (p. 26) Subjects are broken down into a number of teaching units termed modules.

214 Whaley, R.S., 1985. Trends and the future of forestry education. In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 33-36.

215 Wiley, R.W., 1985. The role of the American Fisheries Society in the development of the professional biologist. In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 212-214.

216 Youtie, B.A., 1986. Women: A growing range resource. Women in Forestry 7(4):15-16.
Women in the profession of range management.

217 Zubchenok, T.W., 1985. Forestry education: Preparation for the future. In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 37-38.

RESEARCH EVALUATION AND METHODOLOGY

218 Bengston, D.N., 1985. **Aggregate returns to lumber and wood products research: An index number approach.** In: Risbrudt, C.D. and Jakes, P.J., comp. Forestry research evaluation. pp. 62-68.

"The purpose of this paper is to describe and apply a simple methodology for evaluating the social returns to research at the level of an entire industry." (p. 62)

219 Bengston, D.N., 1985. **Diffusion of innovations in forestry and forest products: Review of the literature.** In: Risbrudt, C.D. and Jakes, P.J., comp. Forestry research evaluation. pp. 69-77.

"The impacts of new technologies on society depend on the extent to which the technologies are utilized and the pattern of their adoption over time. Information about the diffusion of innovations is therefore fundamental to the evaluation of research." (p. 69)

220 Bengston, D.N., 1984. **Income redistribution and the value of forestry research: Issues and approaches.** University of Minnesota, College of Forestry, Dept. of Forest Resources, Staff Paper Series no. 41. 40 pp.

The author concludes that "the distributional effects of research have important implications for public research policy."

221 Buckman, R., 1985. **Summary: Reflections on forestry research evaluations.** In: Risbrudt, C.D. and Jakes, P.J., comp. Forestry research evaluation. pp. 128-130.

222 Fedkiw, J., 1985. **Research evaluation and policymaking.** In: Risbrudt, C.D. and Jakes, P.J., comp. Forestry research evaluation. pp. 5-9.

223 Fege, A.S., 1985. **Research evaluation techniques applied to a case study of short-rotation forestry.** In: Risbrudt, C.D. and Jakes, P.J., comp. Forestry research evaluation. pp. 82-90.

Three aspects of a case study of short rotation forestry are described in this paper: 1) the relationships between funds and publications on an annual basis, as measures of research inputs and outputs; 2) the relationships between total funds and publications; and 3) the level of participation of investigators from one 5-year period to the next as measured by funds and publications. (p. 82)

224 Giese, R.L., Martin, A.J., and Stier, J.C., 1985. **Forestry research priorities for Wisconsin: Perceptions of user groups.** University of Wisconsin, School of Natural Resources, Department of Forestry. Forest Resource Analyses no. 4 (also published as its R3348). 26 pp.

225 Gregersen, H., 1985. The University of Minnesota forestry research evaluation program. In: Risbrudt, C.D. and Jakes, P.J., comp. Forestry research evaluation. pp. 31-33.

226 Haygreen, J., Gregersen, H., Holland, I., and Stone, R., 1986. The economic impact of timber utilization research. Forest Products Journal 36(2):12-20.

"This study presents one means for analyzing the benefits of forest products research by determining its impact on softwood timber utilization... Results of this analysis indicate that expenditures on timber utilization research have been well justified." (p. 12)

227 Hyde, W.F., 1985. A proposed forestry research evaluation project. In: Risbrudt, C.D. and Jakes, P.J., comp. Forestry research evaluation. pp. 34-48.

Introduces a research program currently underway at Duke University.

228 Jakes, P.J., 1985. Variability in researcher productivity. In: Risbrudt, C.D. and Jakes, P.J., comp. Forestry research evaluation. pp.91-96.

"There is...a wide distribution in the number of publications produced by individual researchers, and more study is needed to explain the relationships between quantity and quality of publications and overall productivity." (p. 96)

229 Kaiser, H.F. and Mills, T.J., 1985. Southern forestry and federal economics research: Direction under the new administration. In: Cubbage, F.W. and Robinson, V.L., eds. Joint proceedings of 1985 Southern Forest Economics Workshop and 1984 Southern Economic Assoc. Convention. pp. 53-61.

The federal budget appropriation for forest economic research has been steadily decreasing over the last 4 or 5 years.

230 Lundgren, A.L., 1985. The future direction of forestry research evaluation efforts. In: Risbrudt, C.D. and Jakes, P.J., comp. Forestry research evaluation. pp. 121-123.

231 Olmstead, J., 1985. The marketing of evaluation research. In: Risbrudt, C.D. and Jakes, P.J., comp. Forestry research evaluation. pp. 100-109.

"Evaluation researchers can be conceived of as producers/marketers who design and offer various sorts of products to various markets." (p. 106)

232 Philpot, C.W., 1985. Research and development: Can we increase productivity by recognizing the difference? In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp.207-211.

The author defines research, development, extension, and technology transfer. He concludes that "The Forest Service should seriously consider an R & D organization which includes research, development, application, and extension responsibilities in one branch." (p. 211)

233 Risbrudt, C., 1985. **A review of current forestry studies.** In: Risbrudt, C.D. and Jakes, P.J., comp. Forestry research evaluation. pp. 29-30.

234 Risbrudt, C.D. and Jakes, P.J., comp., 1985. **Forestry research evaluation: Current progress, future directions. Proceedings of the Forestry Research Evaluation Workshop, St. Paul, 1984.** U.S. Forest Service, Gen. Tech. Rep. NC-104. 140 pp.

Selected papers are indexed in this issue.

235 Ruttan, V., 1985. **The agricultural research evaluation experience.** In: Risbrudt, C.D. and Jakes, P.J., comp. Forestry research evaluation. pp. 14-15.

236 Seldon, B.J., 1985. **Supply functions and social returns to research.** In: Risbrudt, C.D. and Jakes, P.J., comp. Forestry research evaluation. pp. 111-115.

"Two major approaches are currently used by economists to study the economic impact of new process research which raises the productivity of factors of production...." They are: the "supply function approach" and the "production function approach." (p. 111)

237 Skok, R., 1985. **Reflections on forestry research evaluation.** In: Risbrudt, C.D. and Jakes, P.J., comp. Forestry research evaluation. pp. 19-20.

238 Skok, R.A., 1985. **Trends and organization of U.S. forestry research in the university sector.** In: Northeastern Forest Resource Planners Association. Proc. 7th annual...conference, 1985. pp. 12-30.

This paper focuses "on the 61 university research organizations eligible for and participating in the McIntire-Stennis Cooperative Forestry Research Program." (p. 12)

239 Westgate, R.A., 1985. **Returns to investment in forestry research: The case of containerized forest tree seedlings.** In: Risbrudt, C.D., and Jakes, P.J., comp. Forestry research evaluation. pp. 117-118.

"This study analyzes the economic impacts of research which led to the adoption of containerized forest tree seedlings (CFTS) in this country as a method of forest regeneration." (p. 117)

TECHNOLOGY TRANSFER AND EXTENSION

240 Cooney, T.M., 1985. **Opportunities for streamlining technology transfer.** In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 43-47.

Outlines the services offered to the forestry profession by the Forest Resources Systems Institute of which the author is president.

241 Creighton, J.W., 1985. **Understanding and applications of technology transfer flow factors.** In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 48-52.

"Technology Transfer flow is discussed as it relates to innovation policies and practices."

242 Cubbage, F.W. and Hodges, D.G., 1985. **Professional advice leads in value.** In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 385-389.

"A recent study in Georgia indicates that landowners assisted by foresters are apt to produce more pine timber supplies and receive greater prices when selling timber."

243 Cubbage, F.W., 1985. **Physical and marketing effectiveness of educational and technical assistance.** In: Proceedings of a special meeting of the Michigan Forest Products Industry Development Council, July 11, 1985. pp. 17-22.

A discussion of the purposes and components of state technical forestry assistance programs followed by an economic evaluation of state technical forestry assistance.

244 Deneke, F.J. and Fischer, B.C., 1985. **Forest resources extension in the United States--a mandate to lead.** In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 373-377.

245 Graff, J. and Kaiser, F., 1986. **Area foresters and Virginia Seed Tree Law effectiveness.** Southern Journal of Applied Forestry 10(1):42-44.

"The analysis...revealed that because they provided information on reforestation options to landowners, area foresters were key components to the success or failure of the Seed Tree Law." (p. 42)

246 Kellison, R.C., 1985. **Forest resource technology development and transfer in developing countries.** In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 336-338.

247 Larson, L.K., 1985. **Services to non-industrial private forest**

owners--a consultant's view. In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 378-380.

Special emphasis is given to the pros and cons of public and industry assistance programs to non-industrial private foresters.

248 Sindelar, S.S., 1985. The international transfer of research information in forestry: Determining the extent and contribution of foreign research in two U.S. public forestry research efforts. University of Minnesota, Department of Agricultural and Applied Economics, Plan B Paper. 79 pp.

"The purpose of this study is to analyze the transfer and impact of information from foreign sources into the U.S. public forestry research system."

249 U.S. Forest Service, 1986. Technology transfer report, fiscal year 1985. U.S. Forest Service, Area Planning and Development, TT Staff. 73 pp.

An analysis of Forest Service technology transfer activities.

250 Walters, N.R., 1985. The transfer of TWIGS. In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 53-56.

"The transfer of the TWIGS program is an example of an early attempt by the Forest Service to disseminate research findings in the form of software." (p. 53)

ENVIRONMENTAL CONCERNS

251 BenSalem, B. and Baumer, M.C., 1985. Role of forestry inthe control of desertification. In: Sand dune stabilization, shelterbelts and afforestation in dry zones. Rome, Food and Agriculture Organization of the United Nations. FAO Conservation Guide no. 10. pp. 9-15.

A general review.

252 Brokensha, D.W., Riley, B.W., and Castro, A.P., 1983. Fuelwood use in rural Kenya: Impacts of deforestation. Binghampton, N.Y., Institute for Development Anthropology. 54 pp.

253 Buschbacher, R.J., 1986. Tropical deforestation and pasture development. BioScience 36(1):22-28.

"The greatest costs of Amazonian deforestation are cultural estimation and loss of biological diversity." (p. 22)

254 Carpenter, R.A., editor, 1983. Natural systems for development: What planners need to know. New York, Macmillan. 485 pp.

This volume "was developed in response to the pressing need to find creative and constructive ways to integrate natural systems information into economic development planning processes."

255 Gale, R.P., 1986. The U.S. Forest Service and the evolution of the environmental movement. Western Wildlands 11(4):22-26.

"This article presents a five-stage framework that charts the shifting relationships between the Forest Service and its publics."

256 Giliomee, J.H., 1982. The disappearance of the Tropical Rain Forest. Journal of Dendrology 2(1&2):50-54.

"The disappearance of the Tropical Rain Forest is closely associated with the present socio-economic dilemmas in third world rural areas." (p. 54)

257 Gross, L., 1985. Regulations, litigation, and the Forest Service program. In: National Silviculture Workshop, Rapid City, SD, 1985. Proceedings. pp. 15-25.

A discussion of the National Environmental Policy Act regulations, Council of Environmental Quality guidelines, the history of various lawsuits, and the court's interpretation of the regulations and guidelines as they relate to the U.S. Forest Service's vegetation management and other pest management programs.

258 Guppy, N., 1984. Tropical deforestation: A global view. Foreign Affairs 62:928-965.

"A general overview of the problem of deforestation of rainforest lands."

259 Huguet, L., 1983. Replenishing the world's forests: The future of the world's tropical forests. Commonwealth Forestry Review 62:195-200.

An FAO/UNEP study estimates the rate of destruction or degradation of the world's tropical forests at "within the range of 0.58% and 0.32% per year."

260 ICF Incorporated and U.S. EPA, Energy Policy Division, Strategic Studies Staff, 1982. Strategic options for enhancing forest industry productivity in the face of rising atmospheric carbon dioxide. Washington, D.C., ICF Incorporated. 80 pp. + app.

"This report seeks to help the forest products industry address strategic issues that arise because atmospheric carbon dioxide...is increasing globally." This is a peer review draft report.

261 Ledec, G., 1985. The political economy of tropical deforestation. In: Leonard, H.J., ed. Divesting nature's capital; the political economy of environmental abuse in the Third World. New York, Holmes & Meier. pp. 179-226.

"...examines the importance of tropical deforestation; the specific causes and their underlying political and economic incentives; and the barriers and political dynamics involving efforts to control the problem." (p. 179)

262 Marszalek, T., 1985. [Up-to-date problems of the world forest economy.] Sylwan 129:(9):13-22.

In Polish with English summary. The author states that the struggle for forest preservation has become the basic problem of world forestry, and sees three main threats: deforestation due to increasing needs of agriculture; deforestation due to increasing need for fuelwood; dying of forests caused by industrial pollution.

263 Miles, P.D., 1983. Assessing the economic implications of managing nonpoint forestry sources of water pollutants: Case studies in five midwestern states. Plan B paper, University of Minnesota, College of Forestry. 78 pp. + app.

"The major objective of this study is to evaluate the economic implications of undertaking new or modified forest practices deemed necessary to achieve a reduction in water pollution--especially sedimentation."

264 Myers, N., 1984. The primary source: Tropical forests and our future. New York, W.W. Norton. 399 pp.

265 Skinner, J.K., 1985. Big Mac and the tropical forests. Monthly Review 37(7):25-32.

Demand for beef in the U.S. results in a large volume of imports from countries in South and Central America. These countries are cutting their tropical forests in order to provide rangeland for the beef.

266 Srun, S.M., 1985. An overview of the world's deforestation. International Union of Societies of Foresters, Newsletter 22:3-5.

267 Tangley, L., 1986. Saving tropical forests. BioScience 36(1):4-8.

"...A new international plan calls for specific actions to arrest and reverse tropical deforestation." (p. 4)

268 White, R.M., 1984. Environmental policy and scientific uncertainty: The effect of acid rain on forests. In: Luftfororeningar--ett hot mot svensk skogsnaring? Dokumentation fran ett symposium, anordnat av IVA och KSLA June 4-5, 1984. IVA Rapport 276; KSLA Rapport 14. pp. 9-18.

SOCIAL IMPACTS

269 Baxter, J., Cortese, C.F., and Key, W.H., 1984. The social impacts of energy development on national parks: Final report. U.S. National Park Service. 90 pp.

"Energy development and urban encroachment were identified as threats to the National Parks in the 1980 State of the Parks report... This research project is intended to aid...in examining...the relationship between communities and nearby parks and the issues that arise when rapid energy-related growth occurs." (p. 1)

270 Bell, J.E., 1984. Social impact assessment for national Forest Service planning. In: Wenner, L.N., ed. Issues in social impact analysis: Proceedings from an interagency symposium. pp. 74-83.

"Management planning for the National Forests requires recognition by the Forest Service of socioeconomic and cultural environments which impact upon forest lands...." (p. 74)

271 Blahna, D.J. and Wenner, L.N., 1986. Social analysis bibliography for Forest Service programs. Supplementary edition. U.S. Forest Service, Environmental Coordination. 37 pp.

Supplement to a 1984 publication with the same title, compiled by J. Selby and L. Wenner.

272 Bobier, M.J., 1984. How expanded scoping can make environmental analysis more socially relevant. In: Wenner, L.N., ed. Issues in social impact analysis: Proceedings from an interagency symposium. pp. 10-17.

"More extensive use of scoping has led the Forest Service to shift from strict reliance on voluminous ecological impact statements....towards targeting significant social issues as they relate to the environment and incorporating more public values and insights." (p. 10)

273 Brady, M.S., 1984. Social and economic mitigation policies and practices in federal and state agencies. In: Wenner, L.N., ed. Issues in social impact analysis: Proceedings from an interagency symposium. pp. 41-43.

274 Bryan, H., 1984. A guide to social analysis: U.S. Forest Service training manual. Mimeo. 67 + 42 pp.

No publishing information given; Hobson Bryan is Professor and chair, Dept. of Sociology, University of Alabama, University, Alabama 35486.

275 Fricke, P.H., 1985. The use of sociological information in the allocation of natural resources by federal agencies: A comparison of practices. Rural Sociologist 5:96-103.

The paper compares the U.S. Forest Service and the

National Marine Fisheries Service in their approach to making allocation decisions while considering resource ecology, economics and social impacts. The Forest Service has been more successful.

276 Holden, A.G., 1984. **New directions for environmental analysis: Implications for social analysis: Introductory remarks.** In: Wenner, L.N., ed. Issues in social impact analysis: Proceedings from an interagency symposium. pp. 5-8.

277 Lee, R.G., 1981. **Development of methods for using public participation as a data collection instrument for social impact assessment: Final report: An administrative study.** Juneau, Alaska, U.S. Forest Service, Program Planning and Budgeting. Mimeo. 52 pp.

Undated: Probable date, 1981. Prepared by R.G. Lee, College of Forest Resources, University of Washington for Robert Muth, Program Planning and Budgeting, U.S. Forest Service, Juneau, Alaska.

278 Llewellyn, L.G., 1984. **Limitations on social impact assessment at the federal level.** In: Wenner, L.N., ed. Issues in social impact analysis: Proceedings from an interagency symposium. pp. 65-69.

279 Muth, R.M., 1983. **Identifying social effects in forestry decisionmaking: Lessons from the past and prospects for the future.** In: Proceedings, Alaska Symposium on the Social, Economic, and Cultural Impacts of Natural Resource Development, Anchorage, 1982. Sponsored by Alaska Council on Science and Technology, etc. pp. 167-179.

"Social impact assessment attempts to provide information on social values, social concerns, and social effects for use in the decisionmaking process." (p. 167)

280 Selby, J. and Wenner, L., 1984. **Social analysis bibliography for Forest Service programs.** U.S. Forest Service, Environmental Coordination. 49 pp. + indexes.

"...social impact analysis (SIA) refers to a systematic effort to determine how present programs or proposed actions affect the social environment." (introduction)

281 Wenner, L.N., 1984. **Minerals, people, and dollars: Social, economic, and technological aspects of mineral resource development.** U.S. Forest Service, Northern Region, R1-84-08. 139 pp.

"This publication is intended as a primer on mineral activities and their social implications for resource agencies." (p. i)

282 Wenner, L.N., 1981. **Social and economic assessment of oil and gas activities: Information and guidelines.** U.S. Forest

Service, Northern Region, R1-81-01. 110 pp.
This publication was compiled in response to Congressional emphasis (through NEPA, National Forest Management Act, and subsequent legislation) "on social and economic as well as physical and biological concerns in environmental analysis." (p. i)

283 Wenner, L.N., 1985. The practice and promise of social science analysis in the Forest Service: A personal perspective. Prepared for the National Social Analysis Workshop, Denver, Colorado, Apr. 2-4, 1985. Mimeo. 22 pp.

284 Wenner, L.N., editor, 1984. Issues in social impact analysis: Proceedings from an interagency symposium, Nov., 1984. U.S. Forest Service, Environmental Coordination. 86 pp. + appendix.
Proceedings of an interagency symposium on social impact analysis in natural resource agencies. Selected papers are indexed.

SOCIAL SCIENCES APPLIED TO FOREST MANAGEMENT

GENERAL

285 Boerner, D.A., 1986. Mononhahela revisited. American Forests 92(2):16-19, 49-53.

Reviews events in the 1970s relating to clearcutting on the Monongahela National Forest in West Virginia.

286 Naughton, G.G., Wardle, T.D., and Quinkert, K., 1985. Quantifying forest resources benefits: A user's perspective of the Implan model. In: Massey, J.G. et al., eds. Software solutions. pp. 84-88.

287 Pande, D.C., 1984. Forest management--concept and strategy for the regeneration of Himalayan environment. In: Joshi, S.C. Rural Development in the Himalaya: Problems & prospects. Naini Tal, U.P., Gyanodaya Prakashan. pp. 212-229.

288 Smith, W.B. and Spencer, J.S., Jr., 1985. Forest management opportunities for Michigan, 1981-1990. U.S. Forest Service, Research Paper NC-264. 31 pp.

"Uses a computer model to identify commercial forest that would benefit from forest management and the volume of removals that would result."

289 Underwood, R.J., 1983. Sustaining the yield. Forest Focus 30:3-14.

The author asks the question: How do the ideals match the realities of forest management in Western Australia.?

MULTIPLE-USE MANAGEMENT

290 Agee, J.K., 1982. True fir management for wilderness, water, recreation and wildlife values. In: Proc. of the Biology and Management of True Fir in the Pacific Northwest Symposium, University of Washington, College of Forest Resources, Inst. of For. Res., Contribution 45:227-237.

Emphasizes Pacific Northwest practices.

291 Alcock, J.E., 1984. Woodlands management and amenity values. Forest Farmer 43(3):6-7, 23.

"The key to developing and maintaining the recreational and aesthetic value of private forests is to plan for these values before the pressure of meeting production targets or the need for cash is imminent." (p. 23)

292 Bol, M.M.G.R. and Leek, N.A., 1985. [Forest operations and changing management practices.] Nederlands bosbouwtijdschrift 57:348-357.

In Dutch with English summary. "Special attention is paid to the analysis of the influences of changing management practices on forest operations: its technology,...requirements on forest labour, and some cost differece indications of forest operations." (p. 348)

293 Bowes, M.D. and Krutilla, J.V., 1982. Multiple-use forestry and the economics of the multiproduct enterprise. Advances in Applied Micro-economics 2:157-190.

The authors "concentrate on a review of the literature in the economics of the multiproduct firm to find what is useful in addressing the issues arising out of the recent national forest management legislation." (p. 159)

294 Bowes, M.D., 1985. Some thoughts on multiple use forest planning. In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 271-275.

295 Boyce, S.G., 1985. Forestry decisions. U.S. Forest Service, General Technical Report SE-35. 318 pp.

The focus of this publication "is on providing multiple benefits within the biological limits for sustaining productivity of the forest and land... The method is to display the dynamics of selected combinations of benefits, impacts, and costs in simple charts and tables and to allow people to use judgement, insight, and experience to make subjective decisions." (p. 1)

296 Goolsby, W.C. and Young, M.J., 1983. Economic incentives to preserve bottomland hardwood forests. A report presented to the Tennessee Governor's Safe Growth Action Team. University of Tennessee, Water Resources Research Center, Research Report

no. 98. 84 pp.

Nine recommendations for state action to provide economic incentives for the maintenanace of bottomland hardwood forests and wetlands are given.

297 Hendricks, G.L. and Harrison, T.P., 1985. **An overview of FORMAN: Forest management activities scheduling system.** In: Massey, J.G. et al., eds. Software solutions. pp. 24-28.

"FORMAN is a microcomputer based scheduling program designed for use with the Non-Industrial Private Forest (NIPF) sector."

298 Livingston, J.A., 1985. **The non-economist.** Forestry Chronicle 61:143-145.

The author argues that the "economistic (market-place) model of nature and of natural process dominates both ecology and renewable resource management in Canada," and asks the question, "Could any image of nature other than the economistic one be compatible with the goals of resource management in industrial society?"

299 Mumme, R., 1985. **Management policies and directions for eastern national forests and their implications for hardwoods.** In: Proceedings 13th Annual Hardwood Symposium of the Hardwood Research Council. pp. 23-26.

300 Rideout, D., 1985. **Analyzing and accounting for the costs of multiple-use forestry.** In: U.S. Forest Service. Proceedings Forest Transportation Symposium, Casper, Wyoming, 1984. pp. 165-180.

"This paper briefly introduces the basis of a new model that may be used to provide cost accounting and cost allocations in the context of multiple use forestry." (p. 165)

301 Rideout, D., 1983. **Multiple use and the allocation of forest management costs: The problem of joint cost allocation.** In: Timber harvesting in the central Rockies: Problems and opportunities. Colorado State University, Cooperative Extension Service, Publication XCM-87. pp. 331-338.

"This paper shows how current public accounting methods may be inconsistent with multiple use policy. The paper also introduces some alternative accounting concepts from the private sector and from public finance literature." (p. 331)

OWNERSHIP

PUBLIC LANDS

302 Combes, J.A., 1983. **Management of the forest resource, problems and opportunities: Problems and opportunities in forest resource production: The federal lands perspective.** In: Timber harvesting in the central Rockies: Problems and opportunities. Colorado State University, Cooperative Extension Service, Publication XCM-87. pp. 42-48.

303 Gale, R.P. and Miller, M.L., 1985. **Professional and public natural resource management arenas, forests and marine fisheries.** Environment and Behavior 17:651-678.

"Modern natural resource management systems are defined by the interplay of natural resources, profit-seeking resource industries, management bureaucracies and diverse publics. Focusing on the bureaucratic element, this article presents a comparative analysis of the federal managment of forests and marine fisheries." (p. 651)

304 Irland, L.C., 1984. **The 97-million acre challenge: State public land programs in the 1980s.** State Government 57:136-140.

A general overview.

305 Shanks, B., 1984. **This land is your land: The struggle to save America's public lands.** San Francisco, Sierra Club Books. 310 pp.

"deals with the essential history and problems of public land management." (p. ix)

306 U.S. Bureau of Land Management, 1983. **A guide to resource management planning on the public lands.** U.S. Bureau of Land Management. 22 pp.

This guide...highlights...how, when and where public participation is most needed and can be most effective in helping BLM make critical multiple use decisions for the Nation's public land resources.

307 U.S. General Accounting Office, 1982. **Illegal and unauthorized actitivies on public lands—a problem with serious implications.** U.S. General Accounting Office. 22 pp.

"GAO's reviews in California and Oregon show that the Bureau of Land Management and the Forest Service are not effectively enforcing perinent laws and regulations. The National Park Service is doing a better job...." A report by the Comptroller General of the U.S. to the Congress.

308 U.S. General Accounting Office, 1984. **Program to transfer land between the Bureau of Land Management and the Forest Service has stalled.** U.S. General Accounting Office. 51 pp.

A report to the Secretaries of Agriculture and the Interior. The BLM and the Forest Service manage land in many of the same or nearby areas of the West. "Transferring agency jurisdiction to consolidate the land into larger blocks can reduce management costs, increase management efficiency, and improve public service."

309 Wood, L.J. and Kirkpatrick, J.B., 1984. The allocation of rights to public forests in Tasmania: A geographical critique. Applied Geography 4:215-234.

"Change in spatial economies, industrial technologies and societal attitudes can make long-established systems of resource allocation inefficient. Through a detailed examination of the procedures by which publically owned forest has been allocated in Tasmania, this paper illustrates spatial, economic and other inefficiences that have become embedded in the concession system." (p. 215)

310 Wunder, J.R., 1985. Working the range: Essays on the history of western land management and the environment. Westport, CT, Greenwood Press. Contributions in Economics and Economic History no. 61. 241 pp.

Individual articles have not been indexed.

PRIVATE OWNERSHIP

INDUSTRIAL - NONINDUSTRIAL

311 Ferretti, W.M., 1984. **A pilot study of nonindustrial private forest landowner motivation.** Ph.D. diss., State University of New York College of Environmental Science & Forestry; Ann Arbor, MI, University Microfilms International. 273 pp.

"A model of landowner motivation regarding timber management is presented... Survey responses from 117 individuals holding nonindustrial private forest (NIPF) land in New York State constituted the study's data base. Published by UMI, 1985.

312 Minnesota Department of Natural Resources, Division of Forestry, 1983. **A report on the Private Forest Management Program.** Minnesota Department of Natural Resources, Division of Forestry. 24 pp.

"One goal of the Private Forest Management Program is to provide landowners in the state with the technical assistance they need to manage their forest lands." "This report focuses on funding sources, accomplishments, policies, and methods by which to increase the effectiveness of the program."

313 Palmer, M.A., Straka, T.J., and Doolittle, M.L., 1985. **Socioeconomic characteristics, adoption of innovations and nonindustrial private forest regeneration.** In: Cubbage, F.W. and Robinson, V.L., eds. Joint proceedings of 1985 Southern Forest Economics Workshop and 1984 Southern Economic Assoc. Convention. pp. 108-117.

"The...'diffusion of innovations' model to associate individuals with various adopter categories is applied to the forest regeneration behavior of Alabama NIPF landowners." (p. 108)

314 Sedbrook, T., 1983. **Influencing landowners to implement forest managment practices.** In: Timber harvesting in the central Rockies: Problems and opportunities. Colorado State University, Cooperative Extension Service, Publication XCM-87. pp. 64-70.

315 Young, R., 1984. **Understading Illinois' private woodland owners and their management objectives.** Illinois Forest Management: A Quarterly Newsletter for Illinois Landowners 3:1-2.

LABOR CONSIDERATIONS - WORK STUDIES

316 American Pulpwood Association, 1985. Tailgate logging safety. Washington, D.C., American Pulpwood Association. 49 pp. + appendix

Developed by the APA as "a new tool logging contractors and logging crew supervisors can use to improve safety performance on their operations."

317 Larsson, K and Birgegard, L.-E., 1985. Socio-economic study of facotrs influencing labour productivity in the forestry component of the Vinh Phu Pulp and Paper Mill Project in Vietnam. Stockholm, Swedish International Development Authority. 95 pp. + Appendices.

318 Makin, K., 1982. The use of a local forest employment projection technique in planning for manpower development. Mimeo. 37 pp. New Zealand Forest Service Reprint no. 1542.

Undated: Probable date, 1982. "The present paper describes a forest employment projections (FEP) technique which...provides a forecast, over a 20-year time period, of year by year changes in the overall size and skills composition of the labour force needed for a particular forest." (p. 1)

319 Pavlin, I., 1983. Non-technical aspects affecting productivity. Paper presented at Workshop on Technical Appraisal of Public Sector Mechanical Wood Processing Industries, Ljubljana, Yugoslavia, 1983. United Nations Industrial Development Organization ID/WG.390/1. 18 pp.

Management of human resources.

PROTECTION

320 Bellinger, M.D., Dyer, A.A., Chase, R.A., and Kaiser, H.F., 1983. Economic efficency procedures used to evaluate the national fire program on non-federal lands. Colorado State University Experiment Station, Technical Bulletin no. 149. 26 pp.

"This report presents the results of a study that used economic efficiency analysis (or benefit-cost analysis) to evaluate the efficiency of existing fire protection on state and private woodlands in the United States." (p. 1)

321 Gonzalez-Caban, A., 1984. Costs of firefighting mopup activities. U.S. Forest Service, Research Note PSW-367. 5 pp.

322 Gonzalez-Caban, A., 1983. Economic cost of initial attack and large-fire suppression. U.S. Forest Service, Gen. Tech. Rep. PSW-68. 7 pp.

323 Hanisch, M.A., Brown, H.D., and Brown, E.A., editors, 1983. Dutch elm disease management guide. U.S. Department of Agriculture Forest Service and Extension Service. (in cooperation with several state agencies) 23 pp.

The purpose of this guide is "to help states and municipalities develop and sustain successful Dutch elm disease management programs." Includes a section on program costs.

324 Hart, D., 1983. Economic analysis of the Fomes annosus hazard tree removal program in Yosemite National Park. U.S. Forest Service, Region 5, State and Private Forestry, Forest Pest Management, Report no. 83-10. 25 pp.

"This analysis is based on two types of economic evaluation: The present net value (PNV) and the benefit/cost ratio."

325 Hart, D., 1984. Economic analysis of treating a root disease--bark beetle complex, the cause of tree mortality on McCloud Flats, Shasta--Trinity National Forests. U.S. Forest Service, Pacific Southwest Region, State and Private Forestry, Forest Pest Management Report no. 84-10. 9 pp. + app.

"This report documents an analysis of the economic worth of sound, aggressive silvicultural practices, which incorporate forest pest management considerations which are being used to control chronic tree mortality on McCloud Flats, Shasta-Trinity National Forest."

326 Huber, C.M., McClure, J.P., and Cost, N.D., 1985. Incidence and impact of damage to North Carolina's timber, 1984. U.S. Forest Service, Resource Bulletin SE-82. 27 pp.

Losses by major timber species and damaging agent are shown in tables.

327 Marty, R., 1984. **A guide to economic evaluation of spruce budworm management opportunities in the East.** U.S. Department of Agriculture, Agriculture Handbook no. 627. 27 pp.

"Stands should be treated if the value of the timber saved by treatement exceeds the cost of treatment. The evaluation procedure presented in this handbook provides forest owners and managers with the means of determining just what portions of a property qualify for spruce budworm control." (p. 26)

328 McCool, S.F. and Stankey, G.H., 1986. **Visitor attitudes toward wilderness fire management policy--1971-1984.** U.S Forest Service, Research Paper INT-357. 7 pp.

"Visitors to the Selway-Bitterroot Wilderness, MT, were asked about their knowledge of the fire effects and attitudes toward fire management in wilderness settings."

329 Moser, J.C., 1986. **Estimating timber losses from a town ant colony with aerial photographs.** Southern Journal of Applied Forestry 10(1):45-47.

"An investment in town ant control of $2.50 in 1955 yielded a 15% annual rate of return during the 30-yr. period over and above inflation." (p. 47)

330 Omi, P.N., 1985. **University involvement in fire management: Current status and future outlook.** In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 84-86.

331 Parsons, D.J., Graber, D.M., Agee, J.K., and VanWagtendonk, J.W., 1986. **Natural fire management in national parks.** Environmental Management 10:21-24.

332 Pyne, S.J., 1985. **Recent history of fire control and use; or, the knowing flame.** In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 69-80.

333 Redmond, C.H. and Anderson, R.L., 1986. **Economic benefits of using the Resistance Screening Center to assess relative resistance to fusiform rust.** Southern Journal of Applied Forestry 10(1):34-37.

"The USDA Forest Service Resistance Screening Center processes hundreds of slash and loblolly pine seedlots each year to assess relative resistance to fusiform rust." (p. 34)

334 Siegel, W.C., 1985. **Legal implications of prescribed burning in the South.** In: Wade, D.D., comp. Prescribed Fire and Smoke Management in the South: Conference Proceedings. pp. 77-85.

"The legal aspects of prescribed burning in the South fall within two major areas: These are: (1) statutory and regulatory constraints imposed by the states and local government, and (2) liability for property damage and personal injury resulting from escaping fire and smoke drift." (p. 77)

335 VanLear, D.H., 1985. Prescribed fire—its history, uses, and effects in southern forest ecosystems. In: Wade, D.D., comp. Prescribed Fire and Smoke Management in the South: Conference Proceedings. pp. 57-75.

336 Wade, D.D., compiler, 1985. Prescribed Fire and Smoke Management in the South: Conference Proceedings, Atlanta, Georgia, 1984. Asheville, NC, Southeastern Forest Experiment Station. 194 pp.

"A collection of 18 papers that describe current problems and trends in prescribed fire and smoke management, and the results of discussion groups that present recommendations for continuing research and application." Selected articles are indexed in this issue of SSF.

PRODUCTION OF FOREST GOODS AND SERVICES

OUTDOOR RECREATION

337 Allgeier, S.E., 1985. The Recreation Opportunity Spectrum (ROS) and its use in understanding public controversy surrounding natural resource management. In: U.S. Forest Service. Proceedings Forest Transportation Symposium, Casper, Wyoming, 1984. pp. 119-122.

338 Andreasen, B., 1984. Utilizing the Recreation Opportunity Spectrum as a tool in land allocation decisions involving energy development and wildlife. In: Issues and Technology in the Management of Impacted Western Wildlife: Proceedings of a National Symposium, 1982. Boulder, Colorado, Thorne Ecological Institute, Technical publication 14:43-46.

"The Recreation Opportunity Spectrum (ROS) serves as the basic framework for the recreation resource input to Land and Management Planning."

339 Arbeit, D. and Gangaware, T., 1983. The Tennessee statewide recreation study. University of Tennessee, Graduate School of Planning Research Center. 8 vols. (4 technical reports, 3 task reports, 1 final report).

Contents: The Tennessee recreation survey: The methodology; The demand for recreation within Tennessee; Assessment of the need for state funding....; Recreation issues within Tennessee; Recreation needs assessment....; Report on the condition of the existing data system for recreation planning in the Department of Conservation; A bibliography of recreation planning literature.

340 Arbel, A. and Ravid, S.A., 1985. On recreation demand: A time-series approach. Applied Economics 17:979-990.

The purpose of this study is to provide evidence pertaining to characteristics which vary with time rather than across populations: Energy prices, weather, energy shortages, the value of the dollar vs. foreign currencies.

341 Bushnell, R.C. and Hyle, M., 1985. Computerized models for assessing the economic impact of recreation and tourism. In: Propst, D.B., comp. Assessing the economic impacts of recreation and tourism. pp. 46-51.

342 Chappelle, D.E., 1985. Strategies for developing multipliers useful in assessing economic impacts of recreation and tourism. In: Propst, D.B., comp. Assessing the economic impacts of recreation and tourism. pp. 1-6.

343 Duffield, J., 1984. Travel cost and contingent valuation: A comparative analysis. Advances in Applied Micro-Economics 3:67-87.

"This paper provides a comparative analysis of the two most widely used approaches for estimating recreational demand; the travel cost method and contingent valuation." (p. 67)

344 Fesenmaier, D.R. and Lieber, S.R., 1985. Evaluating the stability of outdoor recreation participation models. Professional Geographer 37:15-21.

345 Killen, K. and Buhyoff, G., 1983. The relation of landscape preference to abstract topography. Journal of Environmental Management 17:381-392.

346 Knopp, T.B. and Wieland, W., 1983. Demand and response: The case of snowmobiling in Minnesota. University of Minnesota Agricultural Experiment Station, Station Bulletin 551. 17 pp.
"The purpose of this report is to take a careful look at how the state of Minnesota--particularly the legislature and the public land administering agencies--responded to the demands of snowmobiling." (p. 3)

347 Leitch, J.A. and Leistritz, F.L., 1985. Techniques for assessing the secondary impacts of recreation and tourism. In: Propst, D.B., comp. Assessing the economic impacts of recreation and tourism. pp. 23-27.
"Indirect impacts include changes in employment, gross business volume or gross regional product, personal income, and government revenues." (p. 23)

348 Lieber, S.R. and Fesenmaier, D.R., 1984. Modelling recreation choice: A case study of management alternatives in Chicago. Regional Studies 18:31-43.

349 Loomis, J.B., 1983. Consistency of methods for valuing outdoor recreation. Ph.D. thesis, Colorado State University: Ann Arbor, MI, University Microfilms International. 125 pp.
"This dissertation addresses the theoretical and procedural consistency of three methods used for valuation of the economic efficiency benefits associated with public land based outdoor recreation... The household production, travel cost, and contingent valuation methods...." (p. iii)

350 Machlis, G.E. and Wenderoth, E.L., 1982. Foreign visitors at Grand Canyon National Park: A preliminary study. University of Idaho, College of Forestry, Wildlife and Range Sciences, Cooperative Park Studies Unit, CPSU/UI S82-2. 57 pp. + appendices.
"The study was conducted during the summer of 1981, in an effort to gain an understanding of this growing and important visitor public." (p. 1)

351 Machlis, G.E., Field, D.R., and VanEvery, M.E., 1982. Foreign visitors and interpretation: A sociological look at the Japanese tourist. University of Idaho, College of Forestry,

Wildlife and Range Sciences, Cooperative Park Studies Unit, UI CPSU S82-1. 19 pp. + refs.

"The purpose of this paper is 1) to provide information about Japanese travelers, the Japanese tourism industry, and Japanese society, and 2) to suggest how such information can directly aid interpretive programming." (p. 1)

352 Maki, W.R., 1985. Measuring supply-side economic impacts on tourism/recreation industries. In: Propst, D.B., comp. Assessing the economic impacts of recreation and tourism. pp. 28-39.

"Supply-side economic impacts pertain to changes in sales, work force, and earnings of the providers of tourism/recreation (T/R) services, equipment, and facilities." (p. 28)

353 McLellan, G., 1984. Professional development for outdoor recreation management: Field project abstracts 1983-1984. U.S. Forest Service and Clemson University, College of Forest and Recreation Resources, Dept. of Parks, Recreation and Tourism Management. Extension Research Paper 1983/84-2. 23 pp.

Abstracts of projects conducted during a short course at Clemson University.

354 McLellan, G., 1983. Professional development for outdoor recreation management: Field project abstracts 1982-1983. U.S. Forest Service and Clemson University Dept. of Recreation and Park Administration, Extension/Research Paper 1982/83-5. 17 pages + add.

Abstracts of projects conducted during a 1982-83 short course at Clemson University.

355 Minnesota Department of Natural Resources, Office of Planning, 1985. Recreation development opportunities Edge-of-the-Wilderness Area. Minnesota Dept. of Natural Resources, Office of Planning. 124 pp.

Because of the restrictions on the use of motorized vehicles in the Boudary Waters Canoe Area Wilderness in Minnesota, the DNR "is more frequently called upon to identify and develop recreation opportunities that contribute to local economies...." (p. 1)

356 Mitchell, L.S. and Smith, R.V., 1985. Recreational geography: Inventory and prospect. Professional Geographer 37:6-14.

Recreational geography has taken its place as a major subdivision within the discipline. ...it has not attained a qualitative state of development founded on conceptual or theoretical advances...is beset by...lack of methodological and philosophical concensus, a general paradigm and a strong, positive public image." (p. 6)

357 Propst, D.B., Gavrilis, D.G., Cordell, H.K., and Hansen, W.J., 1985. Assessing the secondary economic impacts of recreation and tourism: Work team recommendations. In: Propst, D.B., comp. Assessing the economic impacts of recreation and tourism. pp. 52-63.

358 Propst, D.B., compiler, 1985. Assessing the economic impacts of recreation and tourism. Asheville, NC, Southeastern Forest Experiment Station. 64 pp.

Papers from a conference and workshop, Michigan State University, Dept. of Park and Recreation Resources, May 14-16, 1984. The papers have been indexed in this issue.

359 Schaffer, W.A., 1985. Using input-output analysis to measure the impact of tourist expenditure: The case of Hawaii. In: Probst, D.B., comp. Assessing the economic impacts of recreation and tourism. pp. 7-15.

360 Stevens, B. and Rose, A., 1985. Regional input-output methods for tourism impact analysis. In: Propst, D.B., comp. Assessing the economic impacts of recreation and tourism. pp. 16-22.

361 Stynes, D.J., Spotts, D.M., and Strunk, J.R., 1985. Relaxing assumptions of perfect information in park visitation models. Professional Geographer 37:21-28.

362 Tyrrell, T.J., 1985. Data considerations in assessing economic impacts of recreation and tourism. In: Propst, D.B., comp. Assessing the economic impacts of recreation and tourism. pp. 40-45.

The focus of this paper is "on two types of error, bias and variance, and on the general sources of these errors in traditional research efforts." (p. 44)

363 U.S. General Accounting Office, 1982. Increasing entrance fees--National Park Service. U.S. General Accounting Office. 51 pp.

A report to the Congress by the Comptroller General of the U.S.

364 Wall, G., 1981. Research in Canadian recreational planning and management. In: Mitchell, B. and Sewell, W.R.D. Canadian resource policies: Problems and prospects. New York, Methuen. pp.233-261.

WILDERNESS MANAGEMENT-NATURE CONSERVATION-NATIONAL PARKS

365 Dingwall, P.R., comp., 1984. **Protection and parks: Essays in the preservation of natural values in protected areas.** Wellington, N.Z., Dept. of Lands and Survey, Information Series no. 12. 66 pp.

Proceedings of Section A4e, 15th Pacific Science Congress, Dunedin, Feb., 1983. Individual articles were not indexed.

366 Eidsvik, H.K., 1986. **Protected areas, conservation and development.** University of British Columbia, H.R. MacMillan Lectureship in Forestry, Feb. 27, 1986. 13 pp.

"A look at the future of parks and other protected areas in British Columbia and Canada."

367 Glover, J. and Glover, R., 1986. **Managing the 'Bob'.** American Forests 92(2):40-41, 59-62.

Wilderness management in the Bob Marshall complex in Montana.

368 Helfand, G.E. and Erickson, K.W., 1982. **Coal and wilderness: A case study of comparative values in the proposed Cranberry Wilderness, West Virginia.** Washington, D.C., Wilderness Society. 45 pp.

369 Nash, A.E.K., 1986. **Wilderness allocations and wildernist advocacy in American wildlands policy.** Western Wildlands 11(4):27-31.

370 Rice, R.E., 1984. **Wilderness and mineral production in Arizona.** Washington, D.C., Wilderness Society. 23 pp.

This report is divided into four sections: (1) an overview of Arizona's nonfuel minerals industry; (2) a brief description of the current availability of wilderness lands in Arizona; (3) an examination of the mineral potential and wilderness values of each of the 11 proposed wilderness areas; and (4) an assessment of the economic consequences of proposed wilderness designations in Ariz.

371 U.S. Forest Service, 1985. **The Bob Marshall, Great Bear and Scapegoat Wildernesses--an action plan for managing recreation (the limits of accepted change).** U.S. Forest Service, Flathead National Forest. 104 pp. + map.

"The plan when finalized will represent a social contract between the public and Forest Service managers regarding how visitor use of the BMWC is to be managed and what kind of wilderness experience the public expects." (p. v)

372 U.S. General Accounting Office, 1985. **New rules for protecting land in the National Park System--consistent compliance needed.** U.S. General Accounting Office. 37 pp.

Report to the Secretary of the Interior. GAO found that

25 of the 38 land protection plans prepared by the NPS "did not implement Interior policy or comply with National Park Service rules."

373 Wilderness Society, 1985. Protecting roadless lands in the national forest planning process: A citizen handbook. Washington, D.C., Wilderness Society. 25 pp. + app.

"The purpose of this handbook is to assist local conservation organizations and concerned individuals who want to participate in the forest planning process with a view toward maintaining some of these roadless lands in their wild, roadless, and undeveloped condition." (p. 1)

RANGE MANAGEMENT

374 Box, T.W. and Hardesty, L.H., 1984. Coming of age in range management. Rangelands 6:195-198.
Discussion of the changing concept of range management over the years.

375 Box, T.W., 1986. New uses of rangelands. In: National Range Conference, Oklahoma City, 1985. Proceedings. pp. 100-104.

376 Box, T.W., 1983. Social and economic implications of range improvement. In: Clawson, W.J., ed. Range improvements--today and tomorrow. pp. 1-2.

377 Clawson, M., 1983. Economics of range improvements. In: Clawson, W.J., ed. Range improvements--today and tomorrow. pp. 3-7.

378 Clawson, W.J., ed., 1983. Range improvements--today and tomorrow. U.S. MAB-3 Grazing Lands Committee, Special Report. 30 pp.
Papers from a symposium sponsored by the Grazing Land Committee of the U.S. Man and the Biosphere Program at the Thirty-Sixth Annual Meeting of the Society for Range Management, Albuquerque, New Mexico, Feb. 15, 1983. Selected papers are indexed in this section.

379 Cook, C.W. and Stubbendieck, J., editors, 1986. Range research: Basic problems and techniques. Rev. ed. Denver, Colorado, Society for Range Management. 317 pp.
Includes a chapter on "Economic research in range management."

380 Cormick, G.W., 1986. Resolving conflicts on the uses of range through mediated negotiations: Answers to the ten most asked questions. In: National Range Conference, Oklahoma City, 1985. Proceedings. pp. 84-92.

381 Giltmier, J.W., 1986. What new demands for use of range could emerge in the future? In: National Range Conference, Oklahoma City, 1985. Proceedings. pp. 97-99.

382 Gray, J.R., Fowler, J.M., and Foster, L., 1983. Grazing leases on private rangelands and implications for public lease fees. New Mexico Agricultural Experiment Station, Research Report 487. 16 pp.

383 Housley, R., 1985. Future of range management on National Forest System lands. In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 160-162.
The author concludes that "there is the potential for the range resource of the National Forest Systems to safely

support more animal months than it now does. Whether it will depends more on economics and politics than it does on ecology." (p. 162)

384 Hyde, D.O., 1986. Conflicts in the use of range--can they be resolved? In: National Range Conference, Oklahoma City, 1985. Proceedings. pp. 27-29.

385 Jones, D.A., 1986. Nonmarket values in range management. In: National Range Conference, Oklahoma City, 1985. Proceedings. pp. 41-43.

"Fish, wildlife, recreation, or any of the other so-called nonmarket resources, have a role to play in management plans for private lands." (p. 42)

386 Michieli, R.A., 1985. An industry in transition and the new political forces in Congress. In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 163-165.

Discussion of public policy regarding federal rangelands.

387 Molini, W.A., 1986. What are the conflicting demands on range today? In: National Range Conference, Oklahoma City, 1985. Proceedings. pp. 93-96.

"The most significant demands--and the demands most often in conflict--are livestock grazing, mining (oil, gas, and geothermal), watershed, and recreation (consumptive and nonconsumptive uses of wildlife)." (p. 93)

388 National Range Conference, Oklahoma City, Nov. 6-8, 1985, 1986. Proceedings. U.S. Department of Agriculture. 158 pp.

On cover: National Range Conference: Opportunities for the Future. Selected papers are indexed in this section.

389 Patterson, G.J., 1983. Social and cultural influences on range improvement: The Oregon Range and Related Resources Evaluation Project as a model. In: Clawson, W.J., ed. Range improvements--today and tomorrow. pp. 8-15.

390 Peterson, D.L. and Flowers, P.J., 1984. Estimating postfire changes in production and value of Northern Rocky Mountain-Intermountain rangelands. U.S. Forest Service, Research Paper PSW-173. 19 pp.

"A simulation model was used to estimate expected postfire changes in the production and value of grazing lands.... An investment analysis procedure was used to calculate the net value change (NVC) of postfire range outputs."

391 Powell, J.L., 1986. Impacts of tax policy on range management. In: National Range Conference, Oklahoma City, 1985. Proceedings. pp. 38-40.

392 Salwasser, H., 1986. A conservationist's viewpoint on rangelands: We can have it all. In: National Range Conference, Oklahoma City, 1985. Proceedings. pp. 143-147.

393 Sandford, S., 1983. Management of pastoral development in the Third World. New York, Wiley. 316 pp.

394 Schmisseur, E. and Miller, R., 1985. Prescribed fire for eastern Oregon rangelands: Management considerations. Oregon State University, Agricultural Experiment Station, Circular of Information 699. 24 pp.

"For many eastern Oregon ranchers, prescribed fire is an economically viable option of obtaining forage.... Management information about planning a prescribed burn is presented, an economic worksheet to aid in making fire decisions is provided and instructions for its use are given."

395 Schuster, J.L., 1986. Capitalizing on range's opportunities for the future--a range scientist's viewpoint. In: National Range Conference, Oklahoma City, 1985. Proceedings. pp. 148-153.

396 Sosebee, R.E., 1986. What should be done to conserve the range resources today? In: National Range Conference, Oklahoma City, 1985. Proceedings. pp. 19-26.

397 Stephens, W.P., 1985. Policy directions and range improvement decisions. In: Clawson, W.J., ed. Range improvements--today and tomorrow. pp. 27-30.

398 Templeton, B.R., 1985. The Bureau of Land Management and public rangeland management. In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 157-159.

399 Thomas, G.W., 1986. Overview of the range resource. In: National Range Conference, Oklahoma City, 1985. Proceedings. pp. 9-14.

Conference overview.

400 Torell, L.A., Godfrey, E.B., and Nielsen, D.B., 1986. Forage utilization cost differentials in a ranch operation: A case study. Journal of Range Management 39:34-39.

"The total cost (fee and non fee) of grazing BLM, FS, and private deeded rangeland was estimated by partial budgeting procedures from records kept by the Saval Ranch, a northeastern Nevada cow-calf operation."

401 Waldrip, W.J., 1986. Range managment and efficient range operations in today's tough business climate. In: National Range Conference, Oklahoma City, 1985. Proceedings. pp. 36-37.

402 Wallace, L.T., 1986. The economics of range management. In:

National Range Conference, Oklahoma City, 1985. Proceedings. pp. 15–18.

403 Young, A.L., 1986. Research and technology——what are their implications for range management in the future? In: National Range Conference, Oklahoma City, 1985. Proceedings. pp. 30–33.

URBAN FORESTRY

404 Burns, G.A., 1986. Urban tree appraisal: The formula approach. Journal of Forestry 84(1):18, 49.
"Value is based on species, condition, and location."

405 Deneke, F., 1983. Urban and community forestry: Where are we going? Journal of Arboriculture 9:99-101.

406 Dwyer, J.F. and Strong, A.L., 1986. Urban-rural forestry in the Netherlands. Journal of Forestry 84(2):57-59.
Intensive and imaginative management of urban trees and forests is widespread in the Netherlands. This fact motivated an exchange visit sponsored by the USDA Office of International Cooperation and Development.

407 Dwyer, J.F., 1985. Research and management for leadership in urban forestry. In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 404-408.

408 Gornicki, P.P. and Harrell, J.B., 1983. Urban forestry in Florida. Arboricultural Journal 7:253-258.

409 Grey, G.W. and Deneke, F.J., 1986. Urban forestry. 2d ed. New York, Wiley. 299 pp.

410 Hudson, B., 1983. Private sector business analogies applied in urban forestry. Journal of Arboriculture 9:253-258.
"For the urban forest budget the competition for the tax dollar is extremely intense. To survive politically the urban forest manager must become more effective in the preparation of fiscal budget requests and develop more of a business posture in their operations."

411 Hurley, G.M., 1986. The important role of public education in urban forest management. Shade Tree 59:1-5.

412 Johnston, M., 1985. Community forestry: A sociological approach to urban forestry. Arboricultural Journal 9:121-126.
"Despite a growing awareness of the importance of trees in the physical welfare of urban communities, limited consideration has been given to their social and psychological functions." (p. 121)

413 Lobel, D.F., 1983. Managing urban forests using forestry concepts. Journal of Arboriculture 9:75-78.
"Steps used in forest management planning are outlined and applied to urban forest management."

414 MacLean, J.T., 1986. Urban forestry 1983-85. U.S. National Agricultural Library, Quick Bibliography Series NAL-BIBL. QB.

86-25.
Includes 254 citations.

415 MacLean, J.T., 1984. Urban forestry, January 1982-December 1983. U.S. National Agricultural Library, Quick Bibliography Series NAL-BIBL.84-19. 18 pp.
223 citations. Updates 83-17.

416 McBane, C.D. and Barrett, J.P., 1986. Town forests and community life: A management guide. University of New Hampshire, Agricultural Experiment Station, Research Report no. 109. 20 pp.
"Through proper designation of lands as town forests, proper planning and management, and input from townspeople, a successful multiple use management plan can be developed allowing various management benefits to be realized--timber, wildlife, watershed, education, and recreation. This guide is intended to be an aid in the establishment...of New England town forests." (p i)

417 Tate, R.L., 1983. Municipal tree management in New Jersey. Shade Tree 56:109-112.

418 Weinstein, G., 1986. Urban tree management: Problem solving in the public eye. Journal of Arboriculture 12:26-28.

WILDLIFE AND FISH

419 Allred, K.L., 1984. An evaluation of the cost of success for wildlife habitat establishment. In: Issues and Technology in the Management of Impacted Western Wildlife: Proceedings of a National Symposium, 1982. Boulder, Colorado, Thorne Ecological Institute, Technical Publication 14:54-59.

"The examples used in this paper illustrate the techniques of incorporating performance standards in a cost-benefit analysis."

420 Brenneman, R., 1984. Forest-wildlife management guidelines. Erie, PA, Hammermill Paper Co. 144 pp.

"These guidelines have been written to provide guidance for the professional foresters who make the day-to-day decisions about what areas to harvest...." The author states that it is the intention of the Hammermill Co. to be aware of the requirements of different species of wildlife and in the process of timber harvesting, to maintain or improve habitat.

421 Hall, F.C., 1985. Wildlife habitats in managed rangelands--the Great Basin of southeastern Oregon: Management practices and options. U.S. Forest Service, General Technical Report PNW-189. 17 pp.

422 Hawkes, C.L., Chalk, D.E., Hoekstra, T.W., and Flather, C.H., 1983. Prediction of wildlife and fish resources for national assessments and appraisals. U.S. Forest Service, General Technical Report RM-100. 21 pp.

423 Hoekstra, T.W. and Hof, J.G., 1985. National assessments of wildlife and fish: A technical framework. U.S. Forest Service, General Technical Report RM-122. 6 pp.

424 Hoekstra, T.W., 1985. Status of increasing state input into RPA: The 1989 national assessment of wildlife and fish. In: Northeastern Forest Resource Planners Association. Proc. 7th annual...conference, 1985. pp. 58-67.

425 Johnson, C.W. and Linder, R.L., 1986. An economic valuation of South Dakota wetlands as a recreation resource for resident hunters. Landscape Journal 5:33-38.

"Economic valuation questionnaires were mailed to a one percent random sample of the 1982 licensed resident hunters in South Dakota. Responses to willingness-to-pay (consumers' surplus) questions were used to measure the monetary value of South Dakota wetlands as a recreational resource for resident hunters." (p. 33)

426 Kinard, F.W., Jr., 1984. Wildlife pays its way. In: Guldin, R.W., ed. Payoffs from new techniques for managing and processing southern hardwoods. pp. 109-111.

"Supplemental income for private landowners is another potential of multiple use forest management that includes fee recreation use." (p. 109)

427 Kovalicky, T., 1985. Wildlife and fish leadership in multiresource forest land management--a manager's perspective. In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 197-200.

The author is Forest Supervisor, Nezperce National Forest.

428 Loomis, J., Sorg, C., and Donnelly, D., 1986. Economic losses to recreational fisheries due to small-head hydro-power development: A case study of the Henry's Fork in Idaho. Journal of Environmental Management 22:85-94.

"The effect of small-head hydro-electric developments on a stream can range from reductions in fish populations to elimination of recreational fishing on some portion of a stream."

429 Loomis, J.B., Donnelly, D.M., Sorg, C.F., and Oldenburg, L., 1985. Net economic value of hunting unique species in Idaho: Bighorn sheep, mountain goat, moose, and antelope. U.S. Forest Service, Resource Bulletin RM-10. 16 pp.

The Travel Cost Method was used.

430 Lyon, L.J. et al., 1985. Coordinating elk and timber management: Final report of the Montana Cooperative Elk-Logging Study 1970-1985. Montana Dept. of Fish, Wildlife and Parks. 53 pp.

Co-authors were: T.N. Lonner, J.P. Weigand, C.L. Marcum, W.D. Edge, J.D. Jones, D.W. McCleerey, and L.L. Hicks. The recommendations "are intended primarily to influence habitat quality for elk." (p.1)

431 Massey, J.G. and Rodgers, J.A., 1984. Deer leasing forest industry timberland in East Texas. In: Guldin, R.W., ed. Payoffs from new techniques for managing and processing southern hardwoods. pp. 112-124.

"This paper provides a discussion of the economics of leasing timberlands for deer hunting in Texas." (p. 113)

432 Organization for Economic Cooperation and Development, 1985. Wild life resources. In: State of the environment 1985. Paris: OECD. pp. 135-157.

Covers the OECD countries.

433 Salwasser, H., Holthausen, R.S., and Darden, T., 1985. Using wildlife and fish to enrich the national forest conservation ethic. In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 170-174.

"This paper discusses some lessons learned from NFMA planning to date and proposes some ideas for conservation leadership using wildlife and fish." (p. 170)

434 Schuster, E.G., Frissell, S.S., Baker, E.E., and Loveless, R.S., Jr., 1985. The Delphi Method: Application to elk habitat quality. U.S. Forest Service, Research Paper INT-353. 32 pp.

435 Sorg, C.F. et al., 1985. Net economic value of cold and warm water fishing in Idaho. U.S. Forest Service, Resource Bulletin RM-11. 26 pp.

Co-authors are J.B. Loomis, D.M. Donnelly, G.L. Peterson, and L.J. Nelson. "Net willingness to pay for cold and warm water fishing in Idaho was estimated...with the Travel Cost Method, and...with the Contingent Value Method."

WOOD PRODUCTION

436 Ballard, R., Farnum, P., Ritchie, G.A., and Winjum, J.K., editors, 1985. Forestry potentials, productivity and value: Proceedings of a symposium held at Tacoma, Washington, Aug. 20-24, 1984. [Tacoma] Weyerhaeuser Co. Weyerhaeuser Science Symposium v.4. 301 pp.

Chapters relate to increasing forest productivity and value through various means such as "manipulating nutrient availability," "manipulating site water balance," "improved regeneration practices" "through biotechnology," etc.

437 Bare, B.B., 1982. The economics of true fir management. In: Proc. of the Biology and Management of True Fir in the Pacific Northwest Symposium. University of Washington, College of Forest Resources, Inst. of For. Res., Contribution 45:9-14.

"This paper evaluates the feasibility of investing in the establishment and management of true fir forests in the higher elevations on the west side of the Cascade mountains." (p. 9)

438 Blyth, J.E., McCurdy, D.R., Burde, J.H., and Smith, W.B., 1985. Fuelwood production and sources from roundwood in Illinois, 1983. U.S. Forest Service, Resource Bulletin NC-92. 73 pp.

"Discusses and analyzes 1983 Illinois fuelwood production from roundwood."

439 Blyth, J.E., Whipple, J.W., Mace, T., and Smith, W.B., 1985. Wisconsin timber industry--an assessment of timber output trends. U.S. Forest Service, Resource Bulletin NC-90. 61 pp.

"Discusses recent Wisconsin forest industry trends; production and receipts of pulpwood, saw logs, and veneer logs; production of fuelwood and other timber products in 1981."

440 Boxman, O. et al., 1985. Toward sustained timber production from tropical rain forests in Suriname. In: Topics in Dutch Forestry Research. Netherlands Journal of Agricultural Science 33:125-132.

Co-authors are: N.R. deGraaf, J. Hendrison, W.B.J. Jonkers, R.L.H. Poels, P. Schmidt and R. Tjon Lim Sang.

441 Chang, S.J., 1985. An economic analysis of a new growth and yield model for oaks in New England. In: Risbrudt, C.D. and Jakes, P.J., comp. Forestry research evaluation. pp. 79-81.

442 Cocklin, C., Lonergan, S.C., and Clark, D.W., 1985. Forest energy plantations: An international perspective. Geoforum 16:257-264.

"This paper describes the general characteristics of forest energy plantations. The results of an extensive survey of forest development projects throughout the world are presented, therein providing an international perspective on the status of energy plantations. The potential contribution of forest energy projects in the developing countries is examined in greater detail." (p. 257)

443 DuBois, M.R., Rogers, R., Kurtz, W.B., and Garrett, H.E., 1984. An economic evaluation of thinning black oak stands in the Missouri Ozarks. In: Guldin, R.W., ed. Payoffs from new techniques for managing and processing southern hardwoods. pp. 40-52.

444 Erickson, D.W., 1985. Is shelterbelt restoration worth it? A South Dakota perspective. In: 50 years of progress in Plains forestry. Great Plains Agricultural Council Publication 116:45-53.

445 Fedkiw, J. et al., 1983. Conversion of southern cropland to southern pine tree plantings: Conversion for conservation feasibility study. U.S. Department of Agriculture, Office of Budget and Program Analysis. 63 pp.

Study participants were: J. Fedkiw, study leader, G.A. Brown, S.R. Huisman, R.F. Boxley, N. Cook, M.L. Cotner, G.C. Taylor, F.H. Kaiser, R.J. Moulton, C.B. Risbrudt, G.R. Nordstrom, and K.D. Schmude. The purpose of the study was "to determine whether...it might be economic to convert low-productivity southern cropland to southern pine plantations."

446 Great Plains Agricultural Council, 1982. Windbreaks: What are they worth? Proceedings, 34th annual meeting, Forestry Committee, Dodge City, Kansas, 1982. Great Plains Agricultural Council Publication no. 106. 264 pp.

447 Gross, F.L., III and Davidson, B.R., 1986. The effect of future federal land planning on hardwood timber production. Crossties 67(2):11-12, 14.

448 Gunter, J.E., 1983. Analysis of silvicultural investments. In: Silviculture of Established Stands in North Central Forests: Proc. 1st Soc. Amer. For. Reg. V Tech. Conf., Duluth, 1983. pp. 45-52.

449 Hagg, A., 1985. [The profitability of pruning combined with a low number of stems after cleaning.] Sveriges Lantbruksuniversitet, Institutionen for Virkeslara, Rapport nr. 168. 60 pp. + tables.

In Swedish with English summary. One of the conclusions drawn is that "it is profitable to prune Scots pine forests with a low number stems after cleaning." (p. 11)

450 Hansen, H.L., 1983. Pruning conifers--applications and economics. In: Silviculture of Established Stands in North Central Forests: Proc. 1st. Soc. Amer. For. Reg. V Tech. Conf., Duluth, 1983. pp. 143-149.

451 Helliwell, D.R., 1982. Options in forestry: A review of literature on the effects of differenct tree species and silvicultural systems on soil, flora, fauna, visual amenity, and timber production. Chichester, Packard Publishing Limited. 60 pp.

Includes a chapter on costs and benefits.

452 Hollowell, R.R. and Porterfield, R.L., 1986. Is tree improvement a good investment? Journal of Forestry 84(2):46-48.

"Tree improvement should be viewed as an investment not a cost." (p. 48)

453 Howe, G.E. and Raettig, T.L., 1984. Predicted genetic and economic gains from tree breeding for the northern region. Inland Empire Tree Improvement Committee, Progress Report 8:65-66.

454 Jensen, S.F., 1983. [Economy of typical productions in forestry.] Copenhagen, Royal Veterinary and Agricultural University, Dept. of Forestry, Reports Series 2: Studies no. 15. 134 pp.

In Danish with English summary. "This paper deals with the economy of wood production in beech, oak and Norway spruce and in the production of Christmas trees and greenery." (p. 2)

455 Jones, K.D. and Zinn, G.W., 1985. Forests and the West Virginia economy. Volume 3: The commercial timber harvest in West Virginia. West Virginia University, Agricultural and Forestry Experiment Station, Bulletin 691, vol. 3. West Virginia Forest Development Series. 34 pp.

"This volume of the West Virginia Forest Development Series examines the latest timber production information available for the state of West Virginia. It defines the status of timber production in the state and provides insight into the dynamics of West Virginia's timber-based industry." (p. 1)

456 Kellison, R.C. and Resovsky, R., 1984. Economic opportunities in hardwood silviculture: Plantation versus natural stand management. In: Guldin, R.W., ed. Payoffs from new techniques for managing and processing southern hardwoods. pp. 19-30.

457 Klemperer, W.D. and Greber, B.J., 1985. The buy versus lease decision for timberlands. In: Cubbage, F.W. and Robinson, V.L., eds. Joint proceedings of 1985 Southern Forest Economics Workshop and 1984 Southern Economic Assoc. Convention. pp. 125-132.

"This paper illustrates decision guidelines for forest products firms deciding whether to buy or lease timberlands." (p. 125)

458 Meyer, R.D. and Klemperer, W.D., 1984. Current status of long-term leasing and cutting contracts in the south. In: Guldin, R.W., ed. Payoffs from new techniques for managing and processing southern hardwoods. pp. 125-130.

Results of a survey indicate that the forest industry favors landowner assistance programs over long-term cutting contracts.

459 Neal, R.B., 1985. Factors affecting the economics of thinning. In: Thinning Southern Pine Plantations Workshop Manual. Washington, D.C., American Pulpwood Association Inc. pp. 71-79.

460 Nova Scotia Dept. Lands and Forests, 1984. Information report: Nova Scotia, a summary of forest production 1935-1983. Truro, Nova Scotia Dept. of Lands and Forests, Program Planning Branch, Forest Resources Planning and Mensuration Division. 33 pp.

461 Orr, B. et al., 1985. Future timber harvests on the Chippewa and Superior National Forests in Minnesota. U.S. Forest Service, Resource Bulletin NC-89. 11 pp.

Co-authors are: J. Buongiorno, T. Young, D.C. Lothner, and E. Kallio.

462 Powell, E.L., 1985. Socioeconomic barriers to windbreak planting, and solutions--"To plant or not to plant." In: 50 years of progress in Plains forestry. Great Plains Agricultural Council Publication 116:56-60.

463 South, D.B., 1986. Economics of seed efficiency. Journal of Forestry 84(3):32-35.

464 Spears, J.S., 1983. Replenishing the world's forests: Tropical reforestation: An achievable goal? Commonwealth Forestry Review 62:201-217.

"This paper highlights past reforestation achievements and examines some of the major constraints. Twenty developing country reforestation 'success stories' are analysed... Ten of these relate to farm forestry...the other ten are examples of industrial plantation forestry."

465 Standiford, R.B. and Ledig, F.T., 1983. Economic evaluation of eucalypt energy plantations. In: Proc. Workshop on Eucalyptus in California, Sacramento, 1983. U.S. Forest Service, Gen. Tech. Rep. PSW-69:42-48.

466 Sutton, W.R.J., 1984. Economic and strategic implications of fast-growing plantations. In: IUFRO Symposium on Site and Productivity of Fast Growing Plantations, Pretoria and Pietermaritzburg, South Africa, 1984. Proceedings. Pretoria, South African Forest Research Institute 1:417-431.

467 Tufts, D.M. and Tufts, R.A., 1985. **Economical thinnings for southern pine plantations.** In: Society of American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 422-426.

468 Turvey, N.D., 1984. **Benefits and costs of forest soil surveys.** In: IUFRO Symposium on Site and Productivity of Fast Growing Plantations, Pretoria and Pietermaritzburg, South Africa, 1984. Proceedings. Pretoria, South African Forest Research Institute 1:139-147.

469 Vann, J.R., 1984. **Increase growth and income from forest fertilization.** U.S. Forest Service, Southern Region, Forestry Report R8-FR 4. 11 pp.

Includes a section on "economics of fertilization." Cover title: "Increase tree growth & income from forest fertilization."

470 Vasievich, J.M., 1984. **Economics of biomass—a new found resource in the South.** In: Proceedings of the 1983 Southern Forest Biomass Workshop. U.S. Forest Service, Southeastern Forest Experiment Station. pp. 16-21.

471 Wagstaff, F.J., 1985. **Economics of using Gambel oak for firewood.** In: Utah Shrub Ecology Workshop, 3rd, Provo, Utah, 1983. Proceedings. pp. 53-58.

472 Zobel, B. and Talbert, J., 1984. **Applied forest tree improvement.** New York, Wiley. 505 pp.

Includes a chapter on "Gain and economics of tree improvement."

TIMBER HARVESTING

473 Barger, R.L., 1983. Environmental impacts of timber harvesting—a research view. In: Timber harvesting in the central Rockies: Problems and opportunities. Colorado State University, Cooperative Extension Service, Publication XCM-87. pp. 256-268.

474 Bradley, D.P., 1983. Foresters can do much to reduce red pine logging costs. In: Silviculture of Established Stands in North Central Forests: Proc. 1st Soc. Amer. For. Reg. V Tech. Conf., Duluth, 1983. pp. 35-44.

"The costs and returns received from red pine lands (site index 60) were discounted over a rotation."

475 Cubbage, F.W. and Werblow, D.A., 1985. Trends in forest harvesting equipment costs. American Society of Agricultural Engineers, Paper no. 85-1591. 16 pp.

Paper presented at ASAE Winter Meeting, Chicago, Dec., 1985. "Forest harvesting equipment fixed and operating costs were determined in 1984. These costs are compared with past equipment costs, to the inflation rate, and to logging costs. Implications for the logging industry are discussed."

476 Geddes-Hinton, L. and Gibson, H.G., 1985. Development of a microcomputer simulation model for tractive harvesting systems. In: Massey, J.G. et al., eds. Software solutions. pp. 152-158.

"A simulation model for timber harvest planning is described where the timber is logged by ground tractors...Output information includes logging cost and data."

477 Geerts, J.M.P. and Twaddle, A.A., 1984. A method to assess log value loss caused by cross-cutting practice on the skidsite. New Zealand Journal of Forestry 29:173-184.

Describes the AVIS (Assessment of Value by Individual Stems) System which the author states "will be a valuable research tool for quantifying value losses during processing and identification of where and why these losses occur." (p. 173)

478 Greber, B.J., 1985. The role of the microcomputer in timber harvest scheduling. In: Massey, J.G. et al., eds. Software solutions. pp. 10-17.

"An introductory overview of different algorithms used in the scheduling of timber harvests and management activities." (p. 10)

479 Greulich, F.E., 1985. Harvesting economics. In: U.S. Forest Service. Proceedings Forest Transportation Symposium, Casper, Wyoming, 1984. pp. 149-160.

480 Harpole, G.B. and Rensi, G., 1985. A computer program for

analysis of fuelwood harvesting costs. U.S. Forest Service, Gen. Tech. Rep. FPL-46. 18 pp.

481 Hrubes, R.J., 1984. Can roadless areas be allocated to wilderness without loss in timber harvest capability? Journal of Forestry 82:369-372.

"To investigate whether the loss of timber harvest capability on areas designated for wilderness could be compensated by increased production on remaining lands, harvest schedules for a western national forest were simulated with FORPLAN...."

482 Johnson, L.R., 1985. Simulation analysis of timber harvesting operations. In: Massey, J.G. et al., eds. Software solutions. pp. 159-167.

"A general simulation model called SAPLOS (Simulaiton APlied to LOgging Systems) was designed to assist in the production planning steps of timber harvesting."

483 Koger, J.L. and Webster, D.B., 1986. Maximizing profits of ground-based harvesting systems. Forest Products Journal 36(2):25-31.

The authors "summarize the results of a research project designed to 1) develop a computer program capable of determining realistic harvesting times and costs, as well as harvesting constraints, in a unique linear programming formulation to obtain maximum profits. This FORTRAN computer model is titled L-O-S-T, an acronym for Logging Optimization Selection Technique." (p. 25)

484 LeDoux, C.B., 1985. Stump-to-mill timber production cost equations for cable logging eastern hardwoods. U.S. Forest Service, Research Paper NE-566. 6 pp.

"Logging cost simulators and data from logging cost studies have been assembled and converted into a series of equations that can be used to estimate the stump-to-mill cost of cable logging in mountainous terrain in the Eastern United States."

485 Lohmander, P., 1985. Pulse extraction under risk. Sveriges Lantbruksuniversitet, Institutionen for Skogsekonomi, Arbetsrapport 47. 69 pp.

"The optimal stopping problem (when to harvest) in resource economics is considered under the assumption of Markov price and growth processes."

486 Lynch, D.L. and Adams, J.C., 1983. Public involvment and timber harvesting: Problems and opportunities. In: Timber harvesting in the central Rockies: Problems and opportunities. Colorado State University, Cooperative Extension Service, Publication XCM-87. pp. 345-356.

487 Putnam, N.E., Kellogg, L.D., and Olsen, E.D., 1984. Production rates and costs of whole-tree, tree-length, and log-length skyline thinning. Forest Products Journal 34(6):65-69.

"Production rates and costs were determined for harvesting smallwood by different methods of skyline yarding...." (p. 65)

488 Quinones, D.G., Alcachupas, P.L., and Eala, R.C., 1983. Cost in harvesting industrial tree plantation species. FPRDI Journal 12(1&2):58-68.

489 Strang, W.J., 1983. On the optimal forest harvesting decision. Economic Inquiry 21:576-583.

"This paper deals with the problems of when and whether to harvest a stand of timber which provides valuable services intact as well as when harvested. The analysis extends a previous treatment with the result that it is optimal not to harvest more often and for a greater number of reasons than had been realized." (p. 576)

TIMBER SUPPLY

490 Bergoffen, G., 1985. **Quantitative analysis in planning; a state and regional supply mode.** In: Northeastern Forest Resource Planners Association. Proc. 7th annual...conference, 1985. pp. 117-122.

491 Blandon, P., 1985. **Forest economics and the Gentan probability distribution.** Journal of the Japanese Forestry Society 67:478-485.

"The purpose of this paper is to consider the economic factors which affect the felling decision, and therefore the GPD. All other factors will be considered constant." (p. 478)

492 Canham, H.O., 1985. **Roundwood supply model for regional planning and policy analysis.** In: Northeastern Forest Resource Planners Association. Proc. 7th annual...conference, 1985. pp. 106-112.

Describes a roundwood supply model--ROSUM.

493 Erickson, G., 1984. **Extending the state's timber supply through lumber conservation practices.** California Forestry Note no. 92. 10 pp.

494 Haynes, R.W., 1986. **Inventory and value of old-growth in the Douglas-fir region.** U.S. Forest Service, Research Note PNW-437. 19 pp.

"Timber inventory data for all owners in western Washington and western Oregon were summarized by age classes to provide an estimate of the remaining amount of old growth timber." (p. 1)

495 McKetta, C.W., 1984. **The stability rationale in forest management: Short-run economic implications of even flow harvest constraints.** Ph.D. diss., University of Washington; Ann Arbor, MI, University Microfilms International. 179 pp.

In examining stability in timber production, the author links it "to the doctrine of sustained yield" and narrows his "analytical focus to economic questions about the feasibility, cost and impact of using even flow harvest constraints to achieve stabilization." (p. 1) Published by UMI, 1985.

496 Peterson, R.M., 1986. **Southern timber supply now and in the future.** Forest Industries 113(1):28-29.

497 Tedder, P.L., Flick, D.D., and LaMont, R.N., 1986. **Private timber supplies may rise sharply in NW.** Forest Industries 113(3):18-19.

"Results of a new computer model of timber inventories in forests west of the Cascades show good potential for recovery of the region's private timberland base as a viable, competitive timber supply." (p. 18)

498 Wolfe, J.D., 1985. Quantitative analysis in planning state and regional roundwood supply/demands models. In: Northeastern Forest Resource Planners Association. Proc. 7th annual...conference, 1985. pp. 113-116.

TIMBER SALES

499 Blair, R.J., 1985. **Selling timber in Illinois.** Illinois Forest Management: A Quarterly Newsletter for Illinois Landowners 8:3-4.

500 Blinn, C.R. and Hovey, T.E., 1986. **Planning your timber sale.** In: Proceedings Woodland Owners and Users Conference, 1986. University of Minnesota, Office of Special Programs. pp. 35-45.
This paper presents guidelines to assist nonindustrial private woodland owners in planning timber sales and marketing timber from their woodland.

501 Crone, A.F., 1986. **So you want to sell some timber!** National Woodlands 9(2):7.

502 Guldin, R.W., 1985. **Analyzing bids for stumpage contracts using order statistics.** In: Cubbage, F.W. and Robinson, V.L., eds. Joint proceedings of 1985 Southern Forest Economics Workshop and 1984 Southern Economic Assoc. Convention. pp. 133-141.
"The purpose of this paper is to explore the possibility of using order statistics to evaluate bidding practices and changes in the market for national forest stumpage." (p. 133)

503 Izlar, B., 1986. **The timber contract: Tool for tomorrow.** American Forests 92(3):44-45, 57-58.
A timber sale contract can be more than only a means to secure payment for a timber sale. It "can be an excellent investment device that helps the landowner accomplish objectives for the land, even after the trees are gone. This is usually done through restrictive and reforestation clauses...."

504 Jolly, D. et al., 1986. **Analysis of costs and revenues in the timber sale program of the Black Hills National Forest.** In: U.S. Forest Service. Analysis of costs and revenues in the timber program of four national forests. pp. 2-1-2-29.
Co-authors are: S. LaSalle, F. Norbury, J. Morrison, L. Neff, J. McCormick, D. Wright, W. Knapp, B. Gee, and F. Kaiser.

505 LaSalle, S. et al., 1986. **Analysis of costs and revenues in the timber sale program of the Clearwater National Forest.** In: U.S. Forest Service. Analysis of costs and revenues in the timber program of four national forests. pp. 4-1-4-25.
Co-authors are: D.Stevenson, A. McCombie, D. Studier, W. Knapp, D.Field, and J. Barrett.

506 McEvoy, T.J., 1986. **Plugging the leaky timber sale contract.** American Tree Farmer 5(1):14-15.

507 Rideout, D., 1985. **Timber sales below cost: Causes, environmentalists and cost accounting.** In: Society of

American Foresters. Foresters' future: Leaders or followers? Proc. 1985 SAF National Convention. pp. 297-300.

"Many of the causes of timber sales below cost are identified and discussed in a historical context showing that a combination of natural, economic, and political conditions shape the current controversy." (p. 297)

508 Sample, V.A., Jr., 1984. **Below-cost timber sales on the national forests.** Washington, D.C., Wilderness Society. 17 pp. + app.

"Analysis of receipts and costs for national forest timber sales for fiscal years 1978, 1982, and 1983, reveal that five out of the nine Forest Service regions consistently incur net losses on their timber sales." (p. 1)

509 Shaffer, R.M., 1986. **How much will I get for my timber?** American Forests 92(3):38-39, 54-55, 57.

510 Stockbridge, J. et al., 1986. **Analyses of costs and revenues in the timber sale program of the Gifford Pinchot National Forest.** In: U.S. Forest Service. Analysis of costs and revenues in the timber program of four national forests. pp. 5-1-5-22.

Co-authors are: R. Ochs, E. Meisenheimer, P. Kline, and F. Stewart.

511 Taber, D.W., 1983. **Woodland owner's guide to selling timber and timber sale contracts.** Cornell University, New York State College of Agriculture and Life Sciences, Dept. of Natural Resources, Conservation Circular 21(5):1-14.

512 U.S. Forest Service, 1986. **Analysis of costs and revenues in the timber program of four national forests.** U.S. Forest Service, Timber Management, Washington Office; Land Management Planning, Washington Office. Various pagings

513 Wright, D. et al., 1986. **Analysis of costs and revenues in the timber sale program of the Arapaho-Roosevelt National Forest.** In: U.S. Forest Service. Analysis of costs and revenues in the timber program of four national forests. pp. 3-1-3-41.

Co-authors are: F. Norbury, D. Shaffer, B. See, J. Morrison, and T. Stubblefield.

SOCIAL SCIENCES APPLIED TO FOREST INDUSTRIES

WOOD-USING INDUSTRIES

514 Abt, R.C., 1984. Regional production structure and factor demand in the U.S. lumber industry. Ph.D. diss., University of California, Berkeley; Ann Arbor, MI, University Microfilms International. 98 pp.

"The primary objective of this study is to identify regional production technology differences and determine their effect on short-run factor demand." (p. 4) Published by UMI, 1985.

515 Amsalem, M.A., 1983. Technology choice in developing countries: The textile and pulp and paper industries. Cambridge, Mass., MIT Press. 240 pp.

516 Anderson, R.B. and Luppold, W.G., 1985. An econometric analysis of pallet demand and supply and raw material usage by the pallet industry in southern regions. In: Cubbage, F.W. and Robinson, V.L., eds. Joint proceedings 1985 Southern Forest Economics Workshop and 1984 Southern Economic Assoc. Convention. pp. 142-149.

"The results of the analysis indicate that macro factors, such as aggregate demand and wage rates, influence pallet demand and supply to a greater extent than forces within the pallet market." (p. 142

517 Anderson, R.B., Luppold, W.G., and Wallin, W.B., 1984. Assessing pallet industry use of the low-grade southern hardwood resource. In: Guldin, R.W., ed. Payoffs from new techniques for managing and processing southern hardwoods. pp. 87-97.

This paper focuses on the economic potential for utilizing low grade southern hardwoods and on the pallet and container industry as a primary influence on this resource in the 1980s and 1990s.

518 Atkinson, W.A., 1986. Zeroing in on zoned management. Journal of Forestry 84(1):27-28.

"The dominant theme in the forest industry of the future will be a search for competitive advantage in growing, in harvesting and manufacturing, and in marketing."

519 Bailes, J.C. and Edwards, R.L., 1985. Improving productivity through internal contracting. Oregon State University, School of Business, Studies in Management and Accounting for the Forest Products Industries no. 26. 8 pp.

"This monograph describes how one company (ITT Rayonier) has instituted a productivity improvement program to reduce its cost of operations in a particular area."

520 Banskota, K., Phillips, W. and Williamson, T., 1985. Factor substitution and economies of scale in the Alberta sawmill

industry. Canadian Journal of Forest Research 15:1025-1030.

521 Bergvall, J.A., 1984. A review: Washington forest industries 1984. Washington Dept. of Natural Resources. 14 pp.

This annual report presents information for 1984 on the timber industry in Washington, along with cumulative data since 1975. Also included are comparisons with neighboring states and the nation as a whole.

522 Bostrom, M. and Nylinder, M., 1985. [The sawmill industry 1984. Part 1: Production and timber requirement.] Sveriges Lantbruksuniversitet, Institutionen for Virkeslara, Rapport nr. 169. 36 pp. + tables.

In Swedish with English summary.

523 Burgers, N., Cockcroft, R., and deJong, D., 1985. Wood preservation in the Netherlands. Styrelsen for Teknisk Utveckling, STU Information no. 457. 72 pp.

Includes information on the industry.

524 Carino, H.F., 1985. Operations research analysis of sawmill profitability vis-a-vis improvement in conversion efficiency. In: Massey, J.G. et al., eds. Software solution. pp. 197-203.

"A systems approach to evaluating potential increases in sawmill profitability that can result from improvements in conversion efficiency is discussed in this paper."

525 Cavalcante, M.S. and Cockcroft, R., 1984. Wood preservation in Brazil. Styrelsen for Teknisk Utveckling, STU Information no. 445. 68 pp.

Includes information on the wood preservation industry.

526 Cleaves, D.A. and O'Laughlin, J., 1985. Forest inventory, plant locations, and firm strategies in the southern plywood industry. In: Cubbage, F.W. and Robinson, V.L., eds. Joint proceedings of 1985 Southern Forest Economics Workshop and 1984 Southern Economic Assoc. Convention. pp. 35-43.

"Southern plywood firms were compared on the basis of several forest resource and timber competition characteristics of parent firms to identify factors that determine plant locations." (p. 35)

527 DeBorger, B. and Buongiorno, J., 1985. Productivity growth in the paper and paperboard industries: A variable cost function approach. Canadian Journal of Forest Research 15:1013-1020.

"The purpose of this study was to develop indices of productivity growth for the paper and paperboard industries in the United States."

528 Downey, A.B., 1983. Forest industry expansion in New Zealand. Journal of the Institute of Wood Science 9:270-275.

529 East Range Joint Powers Board, 1984. Assessment of the potential for forest industry development in the East Range Area. [Duluth, MN], Arrowhead Regional Development Commission. 27 pp.

530 Eckstein, L.W., Jr., 1985. An analysis of organization structures for southern wood departments. In: Cubbage, F.W. and Robinson, V.L., eds. Joint proceedings of 1985 Southern Forest Economics Workshop and 1984 Southern Economic Assoc. Convention. pp. 21-28.

"This paper describes the area and function organization structures used in southern industrial wood departments and examines the influence structure can have on department operations."

531 Eronen, J., 1985. Location strategies of the Soviet pulp and paper industry. Soviet Geography 26:587-607.

532 Evans, B., 1986. The forest product industry, environmental interests and dialogue. Vital Speeches 52:312-316.

A speech delivered to the annual conference, South East Division, American Pulpwood Association, Sea Island, Georgia, November 21, 1985.

533 Flick, W.A. and Dempsey, F.E., 1985. Measuring the economic contribution of forest industries. In: Cubbage, F.W. and Robinson, V.L., eds. Joint proceedings of 1985 Southern Forest Economics Workshop and 1984 Southern Economic Assoc. Convention. pp. 7-13.

"The forest-based industries make a large contribution to a regional economy. Six criteria are presented to indicate a comprehensive procedure for measuring economic contribution." Forest industry is the leading industry in Alabama.

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